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THE LARYNGOSCOPE IN MEDICINE.

BY

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MY object in writing the following short paper is, not to attempt to say anything new or original, but rather to repeat what has been often and well said, and once more to show how great is the help given, by an accurate use of the laryngoscope, in the diagnosis and treatment of otherwise obscure and untreatable cases.

The first man who appears to have conceived it possible to illuminate the various canals of the body, and amongst them the throat, was Bozzini of Frankfort, who, in 1807, published a work on the subject.

In 1827, Senn of Geneva tried to see the glottis of a little girl with mirrors, but failed on account of the small size of his instrument.

In 1829, Babington showed a laryngoscope—or, as he

called it, a "glottiscope"—to the Hunterian Society; but he himself treated it more as a toy, than as an instrument from the use of which, good to suffering humanity was to come.

In 1836, Baumès described a mirror which he had found useful in examining the posterior nares and larynx, and was thus the first to look at the posterior nares during life.

In 1840, Liston saw œdematous growths obstructing the larynx, by means of "such a glass as is used by dentists on a long stalk," which he introduced well into the fauces.

In 1844, Avery of London invented a laryngoscope in principle very like that now in use.

Thus we see that up to this date those who had used instruments for seeing the interior of the larynx, had not made any observations of value, on the physiology or pathology of the organ.

In 1854, however, Manuel Garcia, the famous professor of singing, conceived the idea of looking at his own larynx whilst in the act of singing; and there can be no doubt that his paper, which was read by Professor Sharpey, on May 24th, 1855, before the Royal Society of London,* first showed to the world the value of the laryngeal mirror.

Garcia's observations were, as is only too often the case, treated with apathy in this country, and it was reserved for Türck of Vienna, and Czermak of Pesth, to create the art of laryngoscopy in 1857 and succeeding years.

The year 1857 must be looked on as the date of the

* "Physiological Observations on the Human Voice," *Proc. Royal Society of London*, vol. vii., No. 13, 1855.

invention of the laryngoscope, and its application in the diagnosis and treatment of disease; and thus we find that it came into use only six years after the ophthalmoscope, which was invented by Helmholtz in 1851. The mention of these dates leads me to ask the question: Why is it that, although the laryngoscope has been before the profession practically as long as the ophthalmoscope, where one of the former is used, ten of the latter are? I imagine that the only answer which can be given is, that the value of the two instruments to the general practitioner, as distinguished from the specialist, is in the same proportion as the number of them in use. If this be the opinion held, I propose to try and show that it is wrong, and that the laryngoscope cannot be omitted from the armamentarium of the physician or surgeon more suitably than the ophthalmoscope, and this entirely apart from its use by specialists.

The instrument which I find most convenient is made on the Viennese pattern, in which the reflector—which has a central hole, and which is larger than in the ordinary English laryngoscope—is held by a band fastened round the head, instead of in a spectacle frame, and can be worn with much more comfort, the weight of the reflector not pressing unpleasantly heavily on the nose; along with this are six mirrors, of various sizes, together with two handles into which they fit, a laryngeal sound, and a brush-holder, with three brushes to screw on to it.*

Having myself discovered and overcome certain difficulties in the use of the instrument, most of which are

* The whole apparatus, in a case, can be obtained of Heinrich Reiner, IX Van Swieten Gasse 10, Vienna, for about 30/-. (I mention this address, although it is that of only one of many Viennese instrument-makers, because some medical friends have had difficulty in getting the instrument.)

avoidable if care be taken, I think it may be advisable to mention them and the precautions to be taken in order to avoid them :—

1. Project the light into the fauces, so that the centre of the luminous disc corresponds with the *base* of the uvula.

2. In pulling out the patient's tongue, the observer's finger ought to be kept rather above the level of the teeth, in order that the frænum linguæ may not be injured.

3. Do not pull the tongue too far out, as reflex action is thus apt to be induced, and the tongue arches at the back and obscures the view.

4. The mirror introduced into the fauces ought to be of such a temperature as to cause no discomfort when applied to the operator's cheek. It may be heated by holding it over the lamp used in examining.

5. Be very careful to carry the mirror back into the fauces without touching the tongue, and when it is on the uvula press this gently upwards and backwards, *without rotating the mirror.*

6. Never keep the mirror in the fauces too long. Several short views may often be got without causing retching, and thus a fair estimate of the condition of the larynx obtained; whilst, if the observer tries to see everything at one introduction of the mirror, retching will ensue, and then all chance of seeing anything further at that sitting is usually at an end.

7. If the uvula is very near to the tongue, and there is thus a danger of touching the latter in introducing the mirror, tell the patient to take in a deep breath, or say "Ah," when the uvula generally rises, and then, by watching your opportunity, before it again descends, the mirror can be applied to it.

8. If the epiglottis hangs over the glottis and thus hides it, by making the patient sound a high note EE, in most cases the epiglottis rises, and allows us to get a fair view of the parts below. The mirror also ought to be introduced lower than usual, and held more perpendicularly in such a case.

9. In some patients the hyperæsthesia of the fauces is so great that, in spite of repeated attempts at examination, retching ensues immediately the mirror touches the back of the throat. For this troublesome complication many remedies have been recommended; *e.g.*, bromide of potassium has been used internally, as a gargle, and as a spray, but this I have found to be most uncertain in its action. Türck and Schrœtter paint the parts with chloroform, ether, or a solution of morphia; but that the use of the last-mentioned solution is not without considerable danger, I myself, whilst seeing Schrœtter's practice in Vienna, was witness. It was the case of a fine young soldier, from whose larynx Schrœtter proposed to remove a growth. The vocal cords and adjacent parts were freely painted by the professor's assistant with a strong morphia solution, and the man was deeply poisoned thereby, vomiting and considerable depression ensuing.

Morell Mackenzie recommends sucking small pieces of ice, which, although in many cases efficacious in numbing the faucial sensibility, has the great disadvantage of being difficult always to obtain at a moment's notice; and there is also delay and uncertainty of action.

Now, I only mention these various methods of subduing the sensitiveness of the pharynx, in order to show that they all have their drawbacks; and also in order to add my testimony to the great mass of evidence that has been of late so abundantly forthcoming, that in *cocaine*

we have the drug *par excellence* for the desired object. I have used aqueous solutions of hydrochlorate of cocaine, of strengths varying from 4 % to 8 %, and now prefer the latter concentration; and, although I have used it in a good many cases where the fauces were in a most hyperæsthetic condition, in consequence of which a thorough examination of the larynx was impossible, I have never failed to so far subdue the irritability, and that in a few minutes after freely painting the uvula, fauces, and pharynx with the solution, as to permit of a fair and, in most cases, a thoroughly satisfactory investigation, and this without any disagreeable concomitants.

The laryngoscope, as we have seen, was first shown to be of practical value, not by a physician, but by a singer; and thus, as is consonant with our ideas of scientific methods of research, a knowledge of the pathology of the vocal apparatus was preceded by that of its physiology. Until Garcia looked at his own larynx whilst the vocal cords were vibrating and producing musical notes, nothing definite was known of the way in which the structures that were found on dissection to form the various parts of the organ of speech and song acted, to produce the various sounds which it is capable of uttering. Since Garcia's time much attention has been directed to this side of the question; and who shall say to what lengths investigation may not go, when we find that Lennox Browne and Behnke have actually produced photographs of the vocal cords and adjacent parts, whilst the cords were sounding various musical tones? And thus they consider that they have added important information respecting the vexed question of voice registers. According to these investigators, there are no less than five registers,—a register consisting "of a series of tones which

are produced by the same mechanism."* In each of these registers there is a visible difference, as seen by the laryngoscope, in the shape, vibrating portions, and position of the vocal cords and surrounding parts; and thus a variation in the mechanism that is set in action causes a variation in the structures that produce musical notes, and thus different notes are emitted from the organ. In order that others may see this as well as they, the aid of photography has been called in, and the image of the registers permanently retained. This has also been well done by Dr. French, who exhibited his photographs to the International Medical Congress at Copenhagen, in 1884.

Laryngoscopy, then, is of much value in physiological research; but of how much greater value is it, when we turn to what more nearly concerns us as medical men; viz., pathological investigation! I may then, perhaps, be allowed to relate, very briefly, a few of the conditions which have come under my own notice in hospital and private practice, in which I have derived much help from its employment.

1. *Foreign Bodies in the Throat.*—In these cases, those who do not use the laryngoscope are obliged to use an instrument which is very much less delicate for examining the fauces, &c.; viz., the forefinger, which may be long and thin, and fairly suitable, or short and thick, and most unsuitable for the purpose. Much groping in the dark ensues; the search may be successful or not, but as a rule the patient is submitted to a great deal of discomfort, the parts are congested and made sore, and, after all, the laryngoscope may have to be employed, but under the

* *Voice, Song, and Speech.* By Lennox Browne and Emil Behnke. 3rd Ed., pp. 163. Sampson Low & Co., London. 1884.

greatest difficulties, owing to the worried condition of the throat. As all of us know, foreign bodies in the throat scratch the parts, are distinctly felt, and then it often happens that, after violent exertions on the part of the patient, they pass down into the stomach—it may be from the fauces, or from the side of the epiglottis, or from the pharynx, or even the larynx. But, although the foreign body is safely conveyed into the stomach, *the sensation of its presence in the place where first it lodged, and where, it may be, it scratched the mucous membrane, remains;* and the patient demands its removal. The practitioner, without a moment's delay, proceeds to try and do this, and after groping about in utter darkness, with the finger rubbing against delicate and worried structures, he fails to accomplish anything useful; more pain and distress ensue, and the patient leaves the consulting-room feeling that something which is "sticking in the throat" ought to be taken away.

Foreign bodies lodge between the anterior and posterior pillars, and behind the posterior pillar of the fauces, and the finger is very useful in exploring these crypts. If, however, we find nothing in one or other of these situations, we ought to use the laryngoscope, and to look first of all at the space between the base of the tongue and the epiglottis, and then at the lower part of the cavity where the cricoid and arytenoid cartilages project posteriorly. If nothing is seen, then it may be proper to use the finger, to feel for any small sharp-pointed body which has pierced the mucous membrane; but the laryngoscope ought to be used, before rough manipulation has rendered the fauces so congested and irritable, as to make it very difficult to get a satisfactory view. The use of cocaine solution is most valuable both in enabling us to

carry out a full examination, and to remove any foreign body that is found, without pain. For the relief of the disagreeable sensation of something abnormal remaining in the throat, I prescribe a 1 per cent. solution of cocaine, to be used as a gargle or as a pigment, and in addition, if there is a good deal of congestion, Glycerine of Tannic Acid, to be painted on the throat.

2. *Laryngeal Œdema.*—A few months ago a woman was admitted, under my care, at the Bristol General Hospital, with the following history:—

She had had, for a few weeks, a "bad cold," with a little cough, and the sore throat which so often accompanies such a condition, but was able to do her work, and did not lie up for it at all. On the morning of the day of her admission, soon after breakfast, swallowing became more painful, and she found that she could not breathe so freely as usual; the difficulty of breathing, at first gradually and then rapidly increased until mid-day, when she was brought to the hospital in a most dangerous condition. She was sitting up in bed, her face white, with a purplish hue of part of her cheeks, nose and lips deeply cyanotic, her eyes almost starting from her head, and perspiration standing on her forehead. Her efforts to breathe were very great, and all the extraordinary muscles of respiration were in action; she constantly coughed up thick phlegm, which contained nothing at all like false membrane; her cough was toneless, and her voice reduced to a hoarse whisper; and every now and then, after a moment's ease, there came a paroxysm of coughing, and she fairly struggled for life.

I found that the larynx and trachea were very sensitive to touch, and merely placing my fingers lightly on the

skin over these parts, excited such a spasm that I thought asphyxia must have speedily ensued.

Here, then, we had to do with a most alarming case of sudden impediment to respiration, and the probable condition of things was œdema of some part of the larynx, seeing that we had neither the history, nor the brassy cough, nor the expectoration of false membrane, of croup; and on looking into the fauces and finding nothing abnormal, except a little congestion, diphtheria could be excluded. But there was only one way to make a *probable* diagnosis *certain*, and that was by examining the larynx with the laryngoscope. This I at once did, and got a very satisfactory view of what was to be seen of it. I found the epiglottis enormously swollen, its mucous membrane of a red colour and semi-transparent, and it was so curved on itself as to leave merely a small hole or gap between its lateral extremities, through which the air entered and left the lungs. None of the glottis could be seen, as the swollen epiglottis quite blocked the view. I ordered a succession of hot poultices to the larynx; had a croup-tent rigged up; kept steam constantly going into the tent, impregnated with Tinct. Benzoin. Co.; fed her with sips of hot milk and beef-tea; and Dr. Newnham, the house surgeon, kindly undertook to be ready to perform tracheotomy if these measures were not sufficient to control the swelling, and if asphyxia threatened.

Next day she was somewhat better, had brought up more than a pint of tough stringy phlegm, the epiglottis was less swollen, the gap through which breathing was performed was larger, and the posterior part of the glottis could be seen, and was quite free from swelling; the larynx and trachea were much less tender to touch, and the cough and pain on swallowing were less. Treatment

the same as before. Next day the epiglottis was still less swollen, very red on the right side, and looked as if it might bleed; there was no swelling anywhere about the arytenoid cartilages, nor in the aryteno-epiglottic folds; phlegm still brought up, but not so freely; breathing easier, and swallowing less painful. Treatment as before. Day by day the epiglottis gradually returned to its normal shape and colour: the glottis thus became more and more visible, the secretion of phlegm diminished, the cough and pain on swallowing disappeared, and the breathing became normal. After staying in hospital a short time to regain her strength, she went home quite well.

I have given this rough sketch of the case in order to show that it was only by using the laryngoscope, that the *diagnosis was made certain*, and that I was able to watch the progress of the disease from day to day.

3. *Symptoms observed in Throat Disease simulating and mistaken for those found in Chest Affections.*—One case, in which the laryngoscope enabled me to accurately and easily diagnose what could not even be guessed at without its aid, shows the advantage of using the instrument.

It was that of a young woman, who came to me as an out-patient at the Bristol General Hospital; she had had a hard cough, with very little expectoration, and diminution in vocal power and clearness for many years, in fact from early childhood; she had been treated with "cough mixtures" *ad nauseam*, but, spite of all the drugs that had been administered, the cough continued day and night; and although there was no loss of flesh of any consequence arising from it, still the strain, loss of sleep, and general disturbance made her look thin and anxious.

On examining the chest, I found nothing to account for the symptoms.

What then could be the matter?

The examination of the throat fully answered the question. The fauces were congested, as one would expect them to be, seeing that there had been so much cough. The laryngoscope showed that on the middle third of one of the vocal cords there was a small growth, which, on attempted phonation, prevented the accurate and normal apposition of their inner edges, and so rendered clear voice impossible; at the same time, the vocal cord opposite the one on which the growth was situated was congested, and so the hard cough was accounted for.

The cure of such a condition is simple—viz., removal of the small growth—and cough mixtures are useless, or worse.

Another case, of a powerful young man, who came to me complaining of a constant tickling cough, accompanied by very little expectoration, and that in tiny pellets, got up after much exertion, may serve as a second illustration.

Here, the lungs were quite normal, but the fauces were congested, the tonsils somewhat enlarged, the uvula very long and trailing on the back of the tongue; and on examining with the laryngoscope, a congested condition of the mucous membrane of the larynx and trachea was seen. Insufflations of powdered alum, brushing the affected parts with a solution of chloride of zinc in glycerine, soothing inhalations, and shortening the uvula, gave very great relief; whilst cough mixtures, of which he had had many, had been proved to be of little value.

4. *Chest Affections giving rise to symptoms simulating and mistaken for those found in Throat Disease.*—Such a case as the following shows the value of laryngoscopy in this connection. A man, about 45 years of age, came to me

at the Bristol General Hospital, as an out-patient, complaining of hoarseness, cough with some expectoration, and debility. The cough was like what one hears in chronic laryngitis; and, indeed, before I saw him, a medical man of great experience had diagnosed that affection. Laryngoscopy showed paralysis of one vocal cord, and on examining the chest, I found evidence of such a condition of things as would lead to pressure on one of the recurrent laryngeal nerves; and thus the symptoms were explained, and I could feel certain that they did not arise from throat disease, and, therefore, that local treatment was not needed.

5. *Throat Conditions found in Phthisis.*—Without going into the very interesting question of the tubercular throat affections which are found to accompany or to precede pulmonary phthisis, I wish to show that it is of much value to *know the exact condition of the larynx* where, in a case of pulmonary phthisis, the voice is altered, or swallowing is painful. In many such cases, we find that the laryngeal mucous membrane is simply anæmic; *i.e.*, it participates in the general anæmia; but this condition, in a certain number of these cases, precedes actual tubercular infiltration, the lowered nutrition of the parts rendering them a prey to the invasion of tubercle bacilli, from direct contact of the phthisical sputum or otherwise.

In other cases we find the epiglottis swollen, and so curled on itself that it assumes a turban-like form; as the disease advances, we get ulceration of this structure. Where this is the case, we find that the patient has much pain in swallowing, and food is apt to get into the air passages, the damaged epiglottis not covering the top of the larynx accurately, on swallowing.

In other cases the aryteno-epiglottic folds are affected.

At first they are much swollen, from infiltration with tubercular matter, and from œdema, and then there is difficulty in breathing, which is noisy and painful; *later*, ulceration of the infiltrated structures supervenes.

In other cases the vocal cords may be merely thickened; but they will become ulcerated sooner or later.

Lastly, paresis, or even paralysis, of one vocal cord supervenes. In the last two conditions, the voice becomes deep, hoarse, or toneless, and speaking is painful.

Thus, in a phthisical case, where there are throat symptoms, we may have to do with conditions of the larynx, varying from mere anæmia up to the severest forms of ulceration and paralysis, all of which are visible to the observer who uses the laryngoscope, and to him alone.

And not only is it of value for us to *diagnose* these conditions, but also to enable us to *treat* them; and by the accurate application of solutions of cocaine, or of insufflations of morphia and iodoform, we can do much to alleviate pain; and by enabling the patient to take food *painlessly*, we materially promote his general well-being.

Then, again, we may be able to diagnose phthisis laryngea even before there is any such affection of any other organ as to enable us to say that it is diseased.

As types of this state of affairs, take the following cases that have come under my care:

1. A sailor, about 30 years of age, complaining of laryngeal cough, hoarseness, night-sweats, and increasing debility. There was no affection of the lungs that I could discover; but he had an unmistakable turban-like infiltrated epiglottis, which was so placed as to prevent my getting a view of the glottis. I have lost sight of him, and do not know if the lungs ultimately became diseased;

but I have little doubt as to the throat condition being phthisical.

2. A sugar refiner, about 55 years of age, whose duty it was to taste the acid material which is formed in the process of refining. This man complained of shortness of breath, especially on exertion, laryngeal cough, and alteration of voice, occasional night-sweats, no marked loss of flesh. His voice was deep and hoarse, and his cough and respiration were significant of laryngeal stenosis.

The laryngoscope revealed considerable swelling of the right aryteno-epiglottic fold and the parts immediately contiguous to it, and the symptoms of obstruction were due to the swollen mucous membrane, which partially blocked the glottis. The lungs were carefully examined, without finding any disease in them. I watched this case for some time, and saw the parts affected with infiltration gradually break down, until there was an open discharging surface larger in diameter than a pea, from which there exuded thick caseous material, the odour of which was abominable. The right lung also gradually became affected, and from being consolidated, began to show signs of breaking down. For purposes of diagnosis, and also for treatment, of such a case of primary phthisis laryngea, the laryngoscope was invaluable; and without its aid I could never have arrived at even approximate accuracy. I was also able to help him by applying remedies accurately to the diseased spot.

3. A gentleman, aged 25, was sent to me by my friend Dr. Markham Skerritt, suffering from pain on swallowing, deep hoarse voice, cough which was almost toneless and accompanied by expectoration, and increasing debility.

His history showed that some years ago Dr. Ord told

him that he had some ulceration of the throat, but that his lungs were quite sound. His voice and cough were almost exactly like those of the preceding case: there was much pain on swallowing, increasing debility, and occasional night-sweats. Laryngoscopy showed that the epiglottis was much thickened and deformed, and ulcerated along its upper edge in several places, which were discharging; there was some swelling of the mucous membrane of the sides of the larynx, and also of the aryteno-epiglottic folds; the vocal cords were ulcerated, and had out-growths on their edges. All these appearances pointed infallibly to laryngeal phthisis; and the examination of the lungs showed mischief at both apices.

Cure was out of the question; but by applying, with the aid of the mirror, iodoform, and other antiseptics, to the ulcers, they took on a more healthy action. His voice improved and cough lessened; and by painting the epiglottis with a solution of cocaine, he was able to take his food with comfort, and thus ate more, and improved in consequence.

As a contrast to the above case, where there was much need of local throat treatment, I may relate that of a patient in whom there was manifest evidence of phthisis of both pulmonary apices, and who had alteration of voice and almost toneless cough accompanying it. Here the laryngoscope showed that one vocal cord was paralysed; but that there was no local throat disease, the chest condition causing the paralysis by interference with one of the recurrent laryngeal nerves. In such a case, it is apparent that the throat needed no local treatment.

6. *Throat Conditions found in Syphilis.*—In this disease, in the vast majority of cases, the upper part of the throat is alone affected, and the laryngoscope is not required,

but there is a certain small proportion of cases in which secondary and tertiary syphilis attacks the epiglottis and larynx, and in these the instrument, for purposes of diagnosis and treatment, is of great value. It is, perhaps, of still greater value in enabling us to decide between laryngeal stenosis, due to phthisical infiltration of parts, and malignant or syphilitic new growth, such as we see in the tertiary stage of the disease.

HEART-LESIONS IN RELATION TO MENTAL SYMPTOMS.*

BY

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Notwithstanding that the ancients were wont to class insanity as a bodily disease,—for Hippocrates taught that mental diseases were due to the circulation of black bile in the blood,—our present knowledge of the physical causation of mental disease is sadly deficient and most imperfect.

Within a comparatively short lapse of time, I have been fortunate enough to meet with a series of cases, in many of which the close sympathetic connection between mind and body was impressively and forcibly illustrated, and where, from the first, the symptoms were of a bodily-mental nature.

I had thus placed at my convenience, for study, a valuable collection of material, both clinical and pathological, and I trust that I have not wholly failed to take advantage of the same.

The subject of heart-lesions, viewed in relation to mental disease, is far too wide to be even summarised in the time at my disposal, and I shall confine my remarks to the part played by mental disease, with or without hypertrophy, in the production of mental symptoms, illus-

* Read at a meeting of the Dorset and West Hants Branch of the British Medical Association.

trating what I have to say by a specimen, and short notes of the case that produced it.

This case was an ordinary example of hypochondriacal melancholia, occurring, without any apparent cause, in a middle-aged man, who had previously enjoyed good health. The certificate on which he was admitted stated that the patient was restless, had delusions, and was suffering from brain-softening. On admission I noted that the rhythm of the heart was irregular and weak, and the mitral sounds muffled. As regards the mental state, he was low, depressed, miserable, and unhappy, yet could talk rationally. He fancied (at times) that he was ruined, and had ruined his family and home. He was reticent, and carefully evaded any question intended to elicit information of the past. Without being too brief, I may state that the mental symptoms did not change to any noticeable degree from the day of his admission till his death.

Eight months after admission he had a sudden attack of cardiac dyspnœa. The entire body was bathed in a cold clammy perspiration. The lips and extremities were livid; the pulse over 100, small and irregular; and he breathed as if each respiration would be his last. The dyspnœa was panting and gasping in its character, and very characteristic of mitral disease with pulmonary congestion. In the treatment of the case (*i.e.*, this attack) nitrite of amyl was prescribed, and with the best results; for in less than ten minutes the pulse had become stronger, more regular, and numbered 80, and the patient was breathing quietly. Next day I made a careful examination of the heart and other organs, and, with one exception—the heart,—they were all in fair working order. It I found to be hypertrophied and dilated, with a loud

mitral regurgitant bruit. After this the mental symptoms were more intense. During the next four weeks he had three similar attacks of cardiac dyspnœa, and died suddenly on the 29th of December, 1885—eight months and two weeks after admission, and four weeks after the first severe attack of cardiac failure.

At the autopsy, sixteen hours after death, the brain was found free from disease, as far as the naked eye could discern; and under the miscroscope, no definite pathological changes were observed. The heart, after being washed and emptied of all clots, weighed 30 oz. The aortic, tricuspid, and pulmonary valves were found competent. The mitral valve did not close. The left ventricle was hypertrophied and dilated, and all the other chambers more or less dilated. The specimen (which was shown at the meeting) explains itself better than words of mine can; and if we can place any confidence in statistics, I believe there are only a few heavier specimens on record.

Such are the crude, brief, and disjointed facts of an interesting case; and the question now is, Can we connect the heart-lesions with the mental symptoms?

Six months before the patient came under our notice, he was in the full enjoyment of ordinary good health. About this time his wife observed that her husband was unusually quiet, and did not take the same interest in his home and little garden. As weeks rolled by the symptoms deepened into regular "depression of spirits," and the doctor was called in. After several months of ineffectual treatment, with "consultations," the patient's removal to an asylum was recommended, and in due course we admitted him.

Here then was a man, insidiously, and without any apparent cause, undergoing a gradual increasing change

of disposition; and, despite all the efforts of medical ingenuity, he got more and more estranged, until his best and dearest friends became his greatest enemies, and his mind the home of all that was miserable.

For some time we looked upon the case as a possible recovery; but when the true nature, *i.e.* the cause of the mental symptoms, was known, all hope of recovery vanished. At no time of his residence in the Asylum did he show symptoms which pointed to coarse brain-disease; and had we recognised earlier the grave nature of the heart-lesions, we should not have held out the hope of even a possible recovery.

"We know how acutely sensitive are the nervous centres and their peripheral arrangements of any departure from the normal." Such a condition of things, therefore, as that resulting from mitral regurgitation, with hypertrophy and dilatation, may lead to material interference with, and perversion of, their functions.

The due fulfilment of the normal functions of each individual organ calls for an adequate supply of nourishment, and specially is this a truism in the case of the brain.

As to the cause of the enormous hypertrophy, I am doubtful, but most probably it was due to a combination of nervous and nutritive causes; and from facts already mentioned, we know that it was not the result of obstructive valvular disease.

A hypertrophied heart is often an useful one, and as long as the hypertrophy in the present case was compensatory, all went well; but as soon as the compensatory nature of the hypertrophy failed, so soon had we interference with, and deviation from, the normal functions of distant organs, more especially the brain.

With this compensatory failure, we had dilatation of the left ventricle, also of the mitral valve, producing the insufficiency.

And here begin our mental troubles. When the heart failed to send to the brain a regular, sufficient, and well-oxygenated supply of blood, that great and mysterious central clock showed signs of weakness in the form of mental depression and distrust. I believe that the mental symptoms were due to incurable disease in a distant organ; viz., the heart. Is it then to be wondered that, with permanent and irremovable heart-lesions as the sole factors and causes of the mental aberration, recovery was unattainable, and death but too certain?

We may accept it as a general, though not a constant rule, that mitral disease produces symptoms of melancholia, and aortic lesions more frequently those of a maniacal type.

Many cases, illustrative of both types, are annually admitted into our asylums, and it behoves everyone who is likely to be called upon to give his opinion, either verbally or in writing, as to a patient's mental stability, to bear in mind this distant nature of the actual cause.

When we meet with a patient who is the subject of mental perversion, in whatever form, let us not be deluded or led astray by the prevalent and erroneous idea, that the case is necessarily one of coarse brain-disease. At the outset our minds ought to walk clear of pathological changes in the brain, and should be directed to the great bodily organs which are so intimately connected with the encephalon.

When we have satisfied ourselves that no disease exists, or that disease in other organs cannot be connected with the mental symptoms, then, but not till then, are we

justified in attributing those symptoms to actual and grave pathological changes in the brain.

"Brain-softening" is a much-abused expression, and, like heart-disease, covers a multitude of sins.

In thus speaking of mental symptoms, I do not wish to be understood to include cases where paralysis or other symptoms indicative of gross brain-lesions exist.

Let me urge upon you the importance, nay more, the absolute necessity, of detecting, diagnosing, and treating, at the earliest possible date, the true cause of the premonitory symptoms of mental disease.

Just as a single spark of fire, extinguishable if at once discovered, may cause a conflagration of many hours' duration; so may a small and trivial lesion, removable by early and judicious treatment, cause the loss of a gifted and talented mind.

THE RECUPERATIVE POWER OF OLD AGE.

BY

H. BOYLE RUNNALLS, M.R.C.S.,

Saltash.

It appears to be the accepted opinion of the public, and of our profession more or less, that old age possesses little recovering power; but, from observation, I am led to think that advanced age is not such an important negative factor in the prognosis of wounds, injuries, operations, or disease as it is stated to be. When we remember that in old persons the physical powers are becoming weakened; that the wear and tear is not so easily combated; that the skin and internal organisms are lessening in their secretory powers; that the muscular tissue is becoming atrophied, or undergoing fatty degeneration, from want of use; that the brain and spinal system are losing their power; and that the circulatory system is undergoing calcareous degeneration,—it does not surprise one that old age is not given credit for much perseverance in repairing wounds or struggling with disease. Actions speak more than words, which is in this case proved by the following records, and that must be my apology for infringing upon the space of this valuable *Journal*. It is always well to remember that "many mickles make a muckle."

James Deacon, Cargreen, age 71. At the age of 30 he received a kick on the back part of his right leg, which

was followed by an abscess. This continued to discharge for several years, when it was found that he had necrosis of the lower end of femur. He was advised to have it removed, but would never consent to its being done; preferring to suffer the pain, rather than run the risk of an operation. It completely incapacitated him from following his occupation, and he spent the greater portion of his time in bed, owing to the pain which was produced by walking. He came under my notice within a few days of his seventy-first birthday, in 1882. I advised him to run the risk of an operation, as I thought if it could be performed without much loss of blood, there was no reason why he should not recover; for the healing process would not produce so much pain and discharge as the disease itself did. After-events proved me to be right. I removed the thigh at the lower third, making "Teale" flaps. At the end of a month the flaps had united; and at the termination of five weeks he was able to get about on crutches. He is still living, and has gained considerably in weight since the operation was performed.

John Hosking, Landulph, age 86. When this man first came under my notice he was suffering from apoplexy, from which he made a good recovery. Ten days after the hæmorrhage had taken place, a small red spot appeared over the front of lower third of tibia. He complained of great pain in it. This enlarged in size until it was about four inches in length and three inches in breadth. This after a few days became gangrenous, with the formation of a slough, extending down to the periosteum, and laying bare the anterior surface of the tendon of the tibialis anticus muscle for about three inches of its length. Within a short time I found that the anterior half of the tendon was necrosed; and it was

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particularly interesting to watch, day by day for about six weeks, the granulations slowly encircling the healthy portion and forming a sheath for it, and gradually throwing off the necrosed portion. After this became detached the granulating process made rapid strides, and in a few weeks the wound was filled, and soon became covered over with skin. He is now able to get about, and enjoys good health.

Elizabeth Hambly, Saltash, age 70. Had consolidation of both lungs. Made good recovery, and is now well and strong.

W. R., age 73. Had consolidation of both lungs. Made good recovery.

W. W., age 86. Had broncho-pneumonia. Made good recovery at end of five weeks.

M. C., age 89. Had fracture of patella. Made good union. She now walks well, the accident happening two years since.

W. H., age 72. Had fracture of patella eighteen months ago, followed by broncho-pneumonia. Is now able to walk well, good union having taken place.

I well remember a case which came under my notice in St. Marylebone Workhouse. It was that of a man, age 89. He was completely paralysed. He was attacked by small-pox, but made a good recovery.

I have selected these cases because of their severity, and as they necessarily more forcibly portray the restorative power which many old persons have. The operation for cataract is a good evidence of the store of repairing power which old age has. I consider that the case of James Deacon is rather remarkable; for all the surgical authorities that I have read state that the operation for amputation of the thigh, after the age of fifty, is almost

certain to be fatal. This proves the opposite. No doubt the long continuance of the disease, and the operation being performed in a country cottage, were the two chief factors of his recovery. The cases of the consolidation of the lungs recovering are also unusual, and show that even here, with the amount of waste that ensues during the career of the disease, old age is at times able to combat with it. In such cases I find that one ounce of equal parts of brandy and milk, injected per rectum every two hours, produces most satisfactory results. I would make an observation regarding the diet. I always endeavour, as far as possible, to give the patient the same kind of food which he or she is accustomed to in health; and if I find that the stomach rebels against that, to give it as little trouble as I possibly can, and resort to nutrient enemas, given in small quantities and at frequent intervals. In summer or winter I invariably have a hot-water jar placed in the bed, as the lessened muscular energy, with consequent diminution of animal heat in old age, is considerably increased by the disease. These, perhaps, are small things; but even they are worthy of our notice and consideration.

Clinical Records.

A CASE OF MASKED EPILEPSY.

By Bonville B. Fox, M.A., M.D. Oxon., Brislington House.

The rarity of cases of masked epilepsy invests each one with some clinical importance, while their pathological and medico-legal relationships are of considerable complexity. I therefore venture to hope that the following report may prove of some little interest.

The subject was an unmarried lady, aged 26, who was transferred to Brislington House from another asylum towards the end of last October. Her previous history was bad. In 1869 she had sustained a severe fall from a swing, was much hurt at the time, and ever since suffered from frequent headaches. She had been insane at least twice before, in 1878 and 1880, and recovered on each occasion after about fifteen months' asylum treatment. Of the character of the attacks and nature of the treatment, I have no very accurate account; but she is reported to have been alternately depressed and moody, and excitable. Her family history was poor and suggestive. Her paternal grandmother at some times was "highly nervous," at others "depressed"; two or three paternal uncles were inebriates, one was epileptic. A first cousin had lately destroyed herself; and her mother, the patient's paternal aunt, then became insane. On her mother's

side there was comparative freedom from neurotic taint, but strong phthisical predisposition.

The present attack dated from December, 1884, commencing, without adequate exciting cause, in incoherence and excitability. It had continued on and off much the same until she came under our care, ten months subsequently. She brought with her the character of being both dangerous and suicidal, her last medical attendant informing us that she often struck the servants, and that windows appeared to possess an irresistible attraction for her, such numbers had she smashed. On admission, her organs and functions appeared healthy; her fingers were cut, from a final window assault a few minutes before starting on her journey; she seemed free from any delusions, but was moody, taciturn, dull, sluggish, and depressed. She frequently sighed, placed her hand to her head, which was overheated, and complained of pain, weight, and other uneasy sensations therein. The pupils were normal. She was quite docile, fully understood all that was said to her, and associated pleasantly with her fellow-patients. After being in the house three or four days, we saw the first and last specimen of her seizures of violence. Then, without warning or provocation, she dashed her hand through a window, clenched the fragments of glass spasmodically, and, of course, cut herself somewhat severely. Asked for an explanation, all she could say was: "Something comes over me, and I don't know what I am doing." It was particularly noticed, however, that the attack was preceded by pallor of countenance, and was followed by temporary confusion and loss of memory. On considering these symptoms, in association with the family epileptic taint, we thought a close relationship to epilepsy more than probable, and

determined to make a systematic trial of treatment on that hypothesis. Accordingly she was promptly placed on scruple doses of bromide of ammonium in sal volatile and camphor-water, thrice daily; her bowels, which were sluggish, were relieved; and she was encouraged to take plenty of regular exercise, occupation, and amusement. This treatment was continued for a month most successfully. She remained dull and lethargic, but there were no further acts of violence. At the end of that time the medicine was stopped; and though for the first few days after its discontinuance there was some increase of cephalalgia, she struggled on without it, maintained her self-control, and a more stable condition of nerve-centres appeared established. Not to be tedious—there was no relapse, but gradual brightening and increase of mental power and activity. After remaining a probationary period of another month or two under our care, she was discharged recovered; better, her father stated, than she had been for the last six years.

Without going into wide and more general questions, I would suggest two points worthy of consideration:—

(a) Was this a case of masked epilepsy, cured by anti-epileptic treatment, at all? or, on the contrary, was it merely a case of impulsive insanity, cured by lapse of time and general treatment; and was the marked improvement so soon noticed due to change of scene from one asylum to another, and not to the bromide? I think the point is an open one; but though I express no opinion, on very inadequate data, as to the real nature of the previous attacks of insanity, or indeed as to that of the commencement of the attack of which we saw the end, I am strongly convinced that the aspect of the case, as it reached us, was one of true masked epilepsy. In fact,

I submit that the following symptoms were pretty typical :—

1. Sudden onset of unconsciousness, during which instantaneous, destructive acts were automatically committed: these acts were objectless, uncomplicated and undesigned, nearly always (as we heard) identically the same, and in their nature essentially epileptic.

2. They were preceded and followed by epileptic phenomena; viz., sudden pallor of countenance, loss of memory, and confusion of ideas.

3. They occurred in a neurotic patient, one of a family tainted with epilepsy.

4. Improvement did not follow immediately on admission from change of scene, but was delayed until the treatment by bromide had commenced.

5. The condition of comparative sanity, apart from the paroxysm, favours the theory of epilepsy.

(b) Granting, then, that this was a case of genuine masked epilepsy, the question arises: What is the relation of such attacks to the ordinary epileptic discharge? Do they replace, or do they follow it? Dr. Hughlings Jackson expresses himself as follows in the West Riding Asylum Report for 1875:—"All kinds of doings after epileptic fits, from slight vagaries to homicidal actions, have one common characteristic—they are automatic; they are done unconsciously, and the patient is irresponsible; hence I use the term mental automatism. . . . I believe there is in such cases, during the paroxysm, an internal discharge, too slight to cause obvious external effects, but strong enough to put out of use, for a time, more or less of highest nervous centres. . . . *The automatism is not, I think, ever epileptic, but always post-epileptic.*" Dr. Jackson's opinion is, of course, entitled to

the greatest respect, and it is with the greatest respect that I venture to criticise it. It is obviously impossible to disprove his contention that a discharge too slight for recognition may precede these automatic acts, but the burden of proof lies on him, and I must confess myself at present somewhat sceptical. Such a good authority as Hammond,* while agreeing in the main with Jackson, thinks that such unconscious acts may be substituted for, instead of always following, a seizure. In our patient the attack, no doubt, commenced with pallor of countenance, as most epileptic fits do; but the true discharge, I take it, was synchronous with the violent blow and subsequent spasm, which I presume replaced the tonic and clonic convulsions we more commonly see.

In conclusion, I would remark that this case illustrates three already well-recognised facts:—

1. The extreme importance of procuring a full family history in every case of insanity, as of other disease. Had I not known of the epileptic taint in our patient's relatives, I should have been slower and less certain in my diagnosis of her disease.

2. The advantage of getting a physical basis for the mental symptoms, even where the pathology is still so much a matter of contention as that of epilepsy. How difficult it is to decipher the exact morbid processes that underlie and determine each case of insanity, none can tell but asylum superintendents. The abandonment of empiricism, and the great advance that has been made of late years in the scientific management of insanity, is sufficient proof of the full recognition of the fact that successful treatment must depend upon accurate knowledge.

* *Diseases of the Nervous System*, p. 673.

3. The value of bromides in such cases. This is so well understood that Dr. Savage* assigns as an essential feature to masked epilepsy, that it can be relieved by bromide of potassium. We substituted the ammonium salt, according to our usual practice where bromides have to be given for any considerable time, unless there is sexual excitement, or any advantage to be gained by depressing the patient.

Lastly, the family history exemplifies the kinship of neuroses, and the modification they sometimes undergo in descent. The paternal grandmother was acknowledged to be "highly nervous and depressed." Relatives are very euphemistic in their accounts, and this description might safely be amplified without exaggeration. At best she must have been in a highly neurotic and unstable condition. Of her children, two or three sons were drunkards, one epileptic, and one daughter insane. Her grandchildren included at least one who committed suicide, and our patient.

A CASE OF INTESTINAL INTUSSUSCEPTION.

By CHRISTOPHER ELLIOTT, M.D., Physician to the Bristol Hospital for Sick Children and Women.

On December 4th, 1885, I was asked by a barber to visit his son, aged 8 years, who had been taken ill suddenly that morning about five o'clock with sharp abdominal pain of a paroxysmal character, and followed by sickness. When I arrived at the house I found the boy was somewhat easier, and in less pain. Temperature 98, pulse 76.

* *Insanity*, p. 385.

The abdomen was resonant upon percussion, and neither palpation nor deep pressure with the hand upon it caused any increase of pain. Learning that the boy had been indulging in sweets and apples the day before, I looked upon the case as one of ordinary colic, and ordered a dose of castor oil, and the patient to be kept on a milk diet.

In the evening I was summoned again hurriedly, and found my patient in great pain. The castor oil had been given, but was almost immediately vomited. There had been several attempts at defæcation, but only a large quantity of bloody mucus had been passed. Temperature 98·8°, pulse 80. I ordered hot fomentations to the abdomen, and prescribed small doses of belladonna, alternately with pulv. ipecac. co., every two hours.

Next morning the patient's condition was much the same. He had had a restless night, vomiting each dose of the belladonna mixture, although he retained the Dover powders. There had been much tenesmus and a further passage of bloody mucus from the rectum. Temperature 98·8°. The lower half of the abdomen was dull, and the dulness extended somewhat higher up on the left side. Believing I had to deal with a case of intestinal intussusception, I asked for and obtained the consent of the boy's father for his admission into the Hospital for Children and Women. There in the afternoon I had him placed under the influence of chloroform, and was able to satisfy myself as to the presence of a "sausage-like" tumour, of 2—3 inches in length and the thickness of the fore-finger, in the left iliac region. The tumour could not, however, be felt with the finger in the rectum. I now tried to reduce the invagination by the insufflation of air up the rectum by means of an ordinary kitchen bellows, to which I attached a short piece of rubber tubing, but without

success. I next gave an enema of warm water, having the patient held in an inverted position, but this also failed to reduce the tumour. I then resumed the insufflation of air, but after steadily persevering with it for fully fifteen minutes, I was afraid to do more then, and determined to obtain the advice of my colleagues.

The same evening we met in consultation, when it was decided to give another enema, and failing that, abdominal section should be performed. Fortunately for the patient the latter proceeding was not necessary, as, at Mr. Norton's suggestion, cold water was employed; and its use was followed with such evident success, that after over a quart of water had been injected the tumour was found to have disappeared, and the intestines could be plainly seen distended under the parietes. The patient was put to bed and given small and frequent doses of pulv. ipecac. co. No food was allowed by the mouth, but enemata of beef tea and milk and brandy were given instead.

Next morning (December 6th) the temperature was 98°, pulse 72, and the patient had slept tolerably well. The abdomen was very tender, but the bowels had acted naturally, the motion being liquid and containing small pieces of hard solid fæces, but free from blood. As the tongue was very furred and the patient complained of thirst, the Dover powders were stopped, and belladonna was given instead.

On December 8th the bowels acted again of themselves, and a large solid motion was passed without pain.

On the 12th the patient was free from all pain and tenderness.

On the 14th he was allowed to get up.

On the 16th he was discharged well.

Such, gentlemen, are the notes of the case, which I

have thought to be of sufficient interest to read before you this evening,* and I have brought them forward also in the hope of eliciting from others their experiences. According to Mr. Durham (*vide* Quain's *Dictionary of Medicine*), one-fourth of the cases of intestinal intussusception on record have occurred in the first year, and more than one-half during the first seven years of life, so that my patient was slightly above the usual age. Without a post-mortem examination it is difficult to say exactly what part of the intestinal tract was involved, but most probably the ileum and cæcum passed into the colon, as the presence of the "sausage-like tumour" is considered by Leichtenstern to be diagnostic of this form of invagination; for he states, in Zeimssen's *Cyclopædia of the Practice of Medicine*, vol. 7, p. 629, that "it can be almost always felt in colon and ileo-cæcal invaginations, but seldom in ileum invaginations." And further, according to Durham, 50 per cent. of cases are ileo-cæcal invaginations.

With regard to *treatment*, many cases have been recorded where success has followed the insufflation of air up the rectum, as well as the injection of warm water or of hot medicinal solutions, such as decoction of poppies, camomile infusion, &c. But so far as I am aware, the employment of *cold water* enemata (as was suggested in this case by Mr. Norton) has not been advocated before; but the success that has attended its use in this instance will certainly induce me to adopt it again in a similar case.

By constringing the swollen parts, subduing spasm, the cold water stimulates the muscular coat of the intestines to contract, and in this way, I believe, enables the stream of water to drive the invaginated parts before it.

* Read before the Bath and Bristol Branch of the British Medical Association.

Having no experience of *laparotomy*, I will only add that hitherto only 15 out of 58 recorded cases have recovered after this operation—which is a mortality of nearly 75 per cent. However, with a better recognition of this complaint, and an earlier adoption of operative interference, with proper antiseptic precautions, I doubt not this mortality will be considerably lessened in the future.

A CASE OF EMPHYSEMATOUS ABSCESS OF THIGH, FROM INTESTINAL INJURY.

By G. HERBERT LILLEY, M.D., Medical Officer, H.M. Convict Prison, Portland.

J. B., male, age 54, was admitted to the hospital of this prison on August 30th, 1883, with crepitating swelling, involving the subcutaneous areolar tissue of nearly the whole of the front of abdomen, extending to chest and back, and to inner side of both thighs. He stated he had been swollen for some time, but he did not think it worth noticing, until it caused personal inconvenience. I ascertained that, about five years before admission, he was struck upon the left groin by a heavy piece of falling timber, and that, on January 17th, 1882, he discovered that he was ruptured on the left side. An ordinary truss for oblique inguinal hernia was supplied. He remained in hospital until October 5th, 1883, when a flannel roller was applied to his chest and abdomen, &c., and he was put to light work,—emphysema at the time being confined only to lower abdominal region, and slightly to thighs. He was periodically examined till October 7th, 1884, when it was found that there was present a considerable

degree of inflammation of inner side of left thigh. From the man's account, the redness developed "in a few hours." I painted a broad band of demarcation with nitrate of silver above and below area of inflammatory redness, and poulticed the limb. On the 11th of October an abscess burst on outer side of thigh, and about five ounces of most offensive pus escaped. A few hours afterwards an opening formed at middle of front of thigh, through which five or six ounces of fæcal fluid were evacuated. I syringed well with carbolic acid lotion (1 in 20) through the openings, and made a counter-opening, inserting a carbolised rubber drainage tube. The wounds were dressed antiseptically, under steam spray. An opiate gave a fairly good night's rest. On the following day a large slough detached from inner side of Scarpa's triangle, followed by the escape of four ounces of fæcal fluid. On the 13th, the discharge from all the openings was less offensive, and tenderness of limb diminished. After well syringing as before, I applied dressings of boracic acid and vaseline (Ferris) on boric lint. On the 15th there was marked improvement, although some bagging was present above the knee. By well bandaging the knee, and elevating the limb, free drainage removed the bagging. On the 16th I removed the rubber tube, and syringed well with carbolic acid lotion (1 in 40), the sinuses looking healthy. On 17th, diarrhœa set in. On 20th, diarrhœa continuing, a circumscribed blush appeared on inner side of thigh. Argent. nit. was again employed, and the redness encircled. On the 26th an abscess burst at this spot, the pus being only slightly offensive. I again syringed with the stronger solution of carbolic acid. Diarrhœa appeared to resist all treatment till the 31st of October, when it ceased. On November 2nd, the wounds

had all closed. On the 15th, he could sit up half the day in his chair. On November 25th I discharged him from hospital: all emphysema was gone, and walking caused no pain or inconvenience. He was transferred on this date to a milder climate, with a gain in weight of 20 lb. during the seven weeks he was under treatment in hospital.

CASES OF VESICAL CALCULI.

By CHARLES F. PICKERING, F.R.C.S., Surgeon to the Bristol General Hospital.

Case I. J. M., a very badly-nourished and puny child, aged 18 months, was admitted on May 26th into the hospital, suffering from acute retention of urine. The mother's account was, that it had never been strong, had suffered from no trouble with the water before, and never had passed blood nor complained of pain in micturition. Four days before admission she noticed the child seemed in great pain, and took it to a doctor, who said it had stoppage of the bowels. The child continued to get worse, and for the last two days had not passed any water. On admission, the bladder was found distended up to the umbilicus. A catheter was passed, and six ounces of water drawn off, which was of foul odour and deposited one-third pus (?) on standing. The house-surgeon passed a sound, and thought he felt a stone once, but not again. I saw the child next day; but found it so ill, that I did not care to sound again. Morning temperature, 102°. On the following day, when I next saw the child, it was *in articulo mortis*. I examined with a sound, without chloroform, but could not detect any stone. The

child died a few hours afterwards. The temperature had risen continuously ever since admission to the time of death, and the child had passed no water except by the catheter. The only sign of stone in this case was the retention of urine. I did not examine by the rectum, as at no time whilst in the hospital did the condition of the child allow of a cutting operation. The death was probably due to a condition which is called, for want of a better name, "urethral fever."

Post-mortem Examination.—The kidneys were somewhat enlarged and swollen, and the pelvis of each kidney a good deal dilated; in other respects these organs were apparently healthy. The bladder was slightly inflamed, and contained, lying free in its cavity, a curious specimen of vesical calculus, about the size of a bantam's egg, and of a kind that I have not seen described before.

The specimen was one of a hard calculus, enclosed in a thick fibrinous envelope. The whole weighed $3\frac{1}{3}$ drachms, and measured two inches in its long diameter and one inch in its shortest. The hard stone in the centre was the size of a pea, and was composed of uric acid. The fibrinous envelope was built up in layers of membrane, easily separated from each other, and forming a tough and compact shell. Fibrinous calculi in the bladder are occasionally seen; but this specimen has, I think, a different pathological origin from fibrinous calculi in general, which are usually changed blood-clots. It appears to me that the formation of the thick membrane in this case is best explained by the German view of stone formation: that a calculus-forming catarrh is set up on the entrance of a stone or foreign body into the bladder, which gives rise to the production of "fibrinous mucus," and this forms the adhesive material which binds

together the inorganic salts. In this specimen the adhesive material was deposited, but the salts are absent in the outer layers, and thus prevented the stone being felt by the sound.

Case II. A young man, aged 16, was admitted into the hospital, complaining of incontinence of urine. On examination I found a very hard calculus, which I thought was oxalic acid in composition. This proved to be the case, as when, a few days after admission, I proceeded to perform litholapaxy, the stone proved too hard for the lithotrite, and the instrument gave way. I determined, as the patient was young, to remove the stone immediately by the lateral operation. This I did, and the patient left the hospital well in fourteen days. I have cut seven times for stone successfuly—once by the median, five times by the lateral, and once by the supra-pubic method. With regard to the lateral, it is becoming the practice to depreciate this time-honoured and successful operation, and to put in its place for all cases the supra-pubic operation. This, I think, is a swing of the pendulum too far in the opposite direction; for whilst I believe that the lateral is the best for children, with regard to adults the case is different, and here the supra-pubic operation should be performed; and I have no doubt it will prove, in these cases, to be the safest. I see Sir H. Thompson discards antiseptics, and does not sew up the wound in the bladder. I should prefer to perform the operation under strict antiseptic precautions, accurately suture the wound in the bladder, and drain the bladder antiseptically; this latter I found the most difficult part of the treatment, as blood-clots and mucus are very liable to frequently block the opening in the catheter, thus necessitating frequent change of the instrument. By constant care and forethought these difficulties may be overcome.

SOME REMARKS ON THE SURGERY OF THE UPPER EYELID.

By F. Richardson Cross, M.B. Lond., F.R.C.S.; Surgeon to the Bristol Eye Hospital; Ophthalmic Surgeon to the Bristol Royal Infirmary.

Each lid fundamentally consists of a fibro-cartilage, attached to the periphery of the orbit by ligaments. The combined ligaments (palpebral, external, and internal tarsal) constitute a continuous membrane, split horizontally by the palpebral aperture, the borders of which are thickened by the free edge of the cartilages, closely covered by conjunctiva. The outer canthus is fixed by the tarsal ligament, whilst the more complicated inner canthus is mainly supported by the tendon of the orbicularis.

The palpebral ligament is in front of the cartilages; it is attached to the superior one only at its lower edge, leaving the upper edge and anterior surface free for the insertion of the levator palpebræ, which thus intervenes between the ligament and the upper part of the cartilage.

Along the anterior free border of the lids the roots of the lashes are attached to the cartilage by a very dense cellular tissue; whilst just in front of the posterior border, which lies against the cornea, are the openings of the Meibomian glands. These glands are closely bound down by conjunctiva upon grooves in the cartilage, and their ducts perforate it to reach the free surface of the edge of the lid.

The arrangement of the mucous membrane upon the inside of the tarsus is quite special; it is unlike that lining the remainder of the lid, and is in marked contrast with

that on the eyeball. Its attachment is most intimate and immovable; it is very vascular, red in colour, and showing well-marked papillæ.

The skin of the lids is very thin and delicate; its glands are very small, and the hair-follicles are extremely rudimentary. No proper subcutaneous tissue can be defined between it and the orbicularis muscle, which, together with a few special slips (orbito-palpebral of Sappey), alone intervenes between the skin and the palpebral ligament.

Slight abnormalities of the conjunctiva of the lids cause considerable worry to the patient; and if allowed to become chronic, they may easily affect the epithelium of the cornea or even produce pannus. Removal of the small calcareous "grits," that are not infrequently found, especially perhaps in gouty patients, is easily conducted under cocaine and affords marked relief. Recently I have treated some cases of granular lids with keratitis (trachoma); and have found excellent results follow the continued instillation of jequirity infusion, according to de Wecker's formula (at first twice a day, and then daily), over a period of two or three weeks. In my cases no very severe inflammation was set up; the eyes became tolerant of the drops, and continued to improve under their use. The cure has been usually completed, according to the conditions present, by using some caustic application or by scarifying.

The application of jequirity in a severe case of interstitial keratitis, with ophthalmia, produced very little effect.

Any form of blepharitis deserves immediate attention, for continued inflammation may permanently alter the mucous membrane, together with the accurate shape of

the tarsal cartilage, which is so intimately connected to it. Recent cases are rapidly cured by the ordinary methods: painting with a strong solution of nitrate of silver has been the most efficacious remedy in my hands for obstinate cases. If the cure is long postponed, and much ulceration has occurred, the resulting cicatricial tissue may, by its contraction, produce entropion and soon develop severe corneal trouble.

It is not less important to aim at an early cure of eczema affecting the eyelashes; for this, in attacking the roots of the hairs, attacks also the cellular pad on the anterior edge of the tarsal cartilage, from which they grow; so that not only are the hairs degenerated, displaced, or destroyed, but the tarsal cartilage suffers with production of trichiasis, and consequent pannus.

Under such conditions, some operative treatment must be undertaken.

Epilation, unless accompanied by destruction of the displaced hair-follicles, is quite useless as a curative measure; an effort must be made to restore the proper anatomical relation of the parts comprising the lid: if this is impossible, the main consideration must be for the cornea. The incurved cartilage is to be everted by cutting a horizontal groove on its cutaneous surface; and two or three Snellen's knots must be passed vertically between the skin carrying the cilia and the cartilage (just traversing the surface of the latter above and below the groove), through the orbicularis, and out through the ligaments at the brow. If the hairs are much incurved, the horizontal skin incision should be made close above them; the roots must then be freed from the cartilage; and, by threads, the ciliary margin can be advanced forward and upward in front of the cartilage, which may also be grooved in

any desirable position. Where, together with trichiasis, the edge of the lid is much altered, it is best to split the latter with a knife, entirely separating the lashes and skin on the one hand from the cartilage on the other. The anterior flap with the hairs may then be drawn upwards to any desirable extent, while the cartilage with the inner edge of the lid and the Meibomian ducts remain *in situ*, or dealt with according to necessity.

Inflammation may so thicken and enlarge the tarsal body as to prevent the proper raising of the upper lid: I have recently seen two well-marked cases of this mechanical ptosis. In a female servant, 25 years old, the upper third of the left cornea was covered by a drooping lid, depending on extra weight and enlargement of a chronic tarsitis. As the thickening gradually subsided under treatment, the ptosis completely recovered. In a girl of 17 a similar condition was predisposed by weakness on both sides of the elevator of the lid: distinct ptosis resulted on the one side, where the muscle was insufficient to raise the thickened cartilage.

Nævus may also cause mechanical ptosis, and obstruct the sight. I have in two cases found electrolysis a good plan of treatment; if there is much fibrous tissue, the whole is best dissected out. Eversion of the lid, with exposure of the palpebral conjunctiva, may result from unwise interference.

Where lesion of the upper branch of the third nerve is the cause of ptosis, together with paralysis of the superior rectus, care must be taken that improvement of the lid does not cause diplopia.

Over-action of the orbicularis is very rarely the cause of ptosis; and the operation of removing a horizontal strip of its fibres, with or without skin, is not satisfactory.

It will usually be found that the occipito-frontalis is active in attempting to do the work of the paralysed levator palpebræ.

By engaging the tarsal cartilage in the loop of a Snellen's knot, passing the ends of the thread in front of the palpebral ligament and the edge of the orbit, through the orbicularis and frontalis, and out through the skin of the forehead, the tarsus can be drawn upwards and fastened to the frontalis muscle. This operation, which Pagenstecher recommended at the International Congress in 1881, is thoroughly scientific, and I have found it give good results. The thread used should be somewhat coarse, in order that it may cause some irritation, with development of granulation tissue. I have lately retained it *in situ* for a month, in a case of bilateral congenital ptosis. The inflammatory thickening in subsiding is followed by cicatricial contraction; and a tendinous band is left, which connects the frontalis with the tarsal cartilage.

The tendency to contraction of the tissues of the upper lid is well seen after abscess, and especially if a foreign body has been left undetected, as may easily be the case. I was consulted for cicatricial shortening, with ectropion of the upper lid, by a man, who said that nearly a year before he had stumbled upon an upright stick, the end of which had wounded this lid. Much inflammation followed, gradually subsiding into a discharging sinus. He produced a fragment of wood, nearly half an inch in length, which, to his astonishment, had escaped from the sinus nine months after the accident.

Ernest S., aged five, came to me a week after he had wounded his upper lid by falling on a clothes-peg. There was extreme cellulitis of the lid: this was incised, and

treated by cotton-wool pressure. It seemed to heal fairly well, but very slowly; and the opening, which continued to discharge, became adherent to the edge of the orbit. There was great tenderness throughout. Five months after the accident, a rough piece of stick, about half an inch long, was brought me, as having come out of the wound, which had almost closed. The marked tenderness had disappeared; the child was unable to close the eye, which remained open during sleep, by reason of the adhesion of the lid to the orbit. De Wecker reports similar cases. In traumatic inflammation of the lid, most careful search should be made for a foreign body; for if cellulitis reach the orbit, it may result in atrophy of the optic nerve.

Periscope of Medical and Surgical Progress.

NOTES ON PRACTICAL MEDICINE.

By Arthur B. Prowse, M.D. Lond., F.R.C.S. Eng.; Assistant Physician, Bristol Royal Infirmary.

Seasonal Prevalence of Pneumonia.—Dr. Seibert, of New York, has more than once directed attention to the close relation existing between those meteorological conditions which favour catarrhal affections and the occurrence of acute fibrinous pneumonia. At the present day, when the specific nature of this disease is receiving much confirmation, it is useful to view the question from another side. In his latest contribution to the subject (*Berl. klin. Woch.*, No. 17, 1886), Dr. Siebert brings forward very strong evidence in favour of the above-named connection. He bases his observations on an investigation of 768 cases of primary pneumonia, distributed in the various months as follows: January 71, February 140, March 103, April 73, May 55, June 37, July 26, August 25, September 43, October 62, November 65, December 78. A comparison with the average temperature of these months shows a striking correspondence between the lowness of temperature and prevalence of pneumonia; and a similar correspondence is manifested with respect to rainfall, except in the summer months, when, in spite of great humidity, there was a minimum of pneumonia. It is also shown that the prevalence of bronchial catarrh closely coincided with that of pneumonia. Dr. Seibert, not content with these general monthly returns, has placed side by side the results of daily meteorological observations, and the dates of occurrence of the cases of pneumonia during each month of the year. Taking the month of February, for example, it is remarkable how closely the onset of the attack follows upon days in which there were combined low temperature, excessive humidity, and high winds. The conclusions at which Dr. Seibert arrives are to the effect that the varying prevalence of the disease can be explained by certain meteorological

states which favour its occurrence. These conditions are a low and falling temperature, excessive and increasing humidity, and high winds. When any two of these factors concur, pneumonia prevails to a greater extent than when one only is present; whilst if all three are in operation, the disease is exceptionally frequent. The same states of weather favour catarrh, and catarrh predisposes to pneumonia. It is more prevalent in spring than in autumn, probably, because of the greater susceptibility to exposure after residence in hot and ill-ventilated rooms during the winter, and because of the greater humidity of spring. Finally, the author does not wish it to be inferred that these meteorological conditions are the sole factors at work in exciting pneumonia; his opinion rather is that, by exciting catarrh, they render individuals more susceptible to the influence of the virus.—*Medical and Surgical Reporter*, Philadelphia, June 5th, 1886.

Salol.—This is a salicylate of phenol or carbolic acid, possessing antipyretic and antiseptic properties, recently discovered by Prof. von Nencki, of Berne. It is a white powder, rather greasy to the touch, with a faint aromatic odour, but almost tasteless; nearly insoluble in water, but dissolved readily by alcohol. From experiment on animals, it appears that the whole of it is excreted in the form of urate of salicyl and sulpho-phenol. The pancreatic fluid effects this change; and the fact that this occurs in the duodenum rather than in the stomach, accounts for the absence of nausea and other gastric symptoms. At a meeting of the Medico-Pharmaceutical Society of Berne (*La Semaine Médicale*, April 14th, 1886), M. Sahli related his experience of the drug, and said he had taken two drachms in a day without experiencing any disagreeable effects, though some of his patients noticed a slight ringing in the ears after large doses. It sometimes colours the urine almost black, just as carbolic acid does. In rheumatism he had found it act quite as well as salicylic acid. One case of chronic urticaria which had resisted every kind of treatment was quickly relieved, as were also several cases of obstinate suborbital neuralgia. In doses of 30 grains it was a powerful antipyretic, reducing the temperature in a case of phthisis 7° Fahr., without causing any unpleasant symptoms. As an antiseptic, it had yielded good results in ozæna and otorrhœa. Other speakers at the meeting confirmed the above statements as to its value, and united in recommending a further trial in rheumatism, fevers, and septic diseases. (*Med. Record*, New York, June 19th, 1886.) Salol would be indicated also in diabetes, as phenol is given. It is given as a local antiseptic in all intestinal catarrhs, and

may be used in typhoid fever, cholera, &c., and against intestinal parasites. As an antiseptic in place of iodoform, it has given such satisfactory results that it is likely to supplant that unpleasantly odorous substance in many ways. The urine of patients taking it becomes completely aseptic; and urine kept in contact with it does not decompose.—*Philadelphia Medical Times*, May 15th, 1886.

Remedy for Hiccough.—Dr. A. G. Gibson, in the *Edinburgh Med. Journ.*, April, 1886, calls attention to the Hippocratic aphorism, "Sneezing occurring after hiccough, removes the hiccough," and says that he has proved its truth by experience. Hiccough, like sneezing, is a modified respiratory movement; and it is quite in accordance with what we know of the transference of nervous action, that the induction of an explosive expiratory act should cause the cessation of the diaphragmatic spasm. Tickling the nostrils, or the application of some gentle irritant, even though it does not cause actual sneezing, is often effectual. In the *Med. Record*, New York, June 5th, 1886, Dr. R. B. Williams recommends the use of a "catarrh snuff," made by mixing one part of powdered veratrum album with four parts of powdered liquorice root. He says: "I have seen the happiest results from it in hiccough of as much as two days' persistence. Of course, it may fail in very stubborn cases; but it never has, thus far, with me."

Catarrhal Jaundice.—The use of cold-water enemata in this affection was first proposed by Krull in the *Berl. klin. Woch.*, p. 159, 1877. He injects two to four pints, at a temperature of 60° Fahr., which is to be retained as long as possible; the enemata being repeated twice a day if necessary. Löwenthal's plan is to use water at 60° Fahr. the first day; on succeeding days an enema is given every morning, the temperature being gradually increased up to 71·5°, which is not exceeded. The cure is generally accomplished by the fourth day; and in no instance have more than seven injections been found necessary. Several cases were of long standing, and had resisted a great variety of treatment. No medicine is given, and a vegetable diet is adhered to.—*New York Med. Journ.* and *Journ. American Med. Assoc.*

Reflex Nasal Cough.—In the *Practitioner* (July, 1886), E. Cresswell Baber, M.B., gives some interesting cases illustrative of this affection. The conclusions he draws are as follows:—(1) Reflex nasal cough is only exceptionally produced by probing the anterior part of the inferior and middle turbinated bodies and the tubercle of the septum.

(2) In children it is not very uncommon to find that a slight hacking cough can be produced by irritating the anterior end of the inferior turbinated body. (3) The cough reaction may occur without erection of the inferior turbinated bodies, and may be intermittent in character. (4) Reflex nasal cough and the act of sneezing are very closely associated, and probably represent different forms or degrees of the same irritation.

The practical outcome of these considerations is, that in cases of spasmodic cough not otherwise to be accounted for, we should do well to examine carefully the nasal cavities in regard to the reflex irritability of their lining membrane.

Sodium Sulphate as an Aperient.—Nöthnagel a year or two ago investigated the action of neutral salts on the intestines. He found that sulphate of sodium—Glauber salt—was the mildest of all; that it first of all caused a slight redness, and, later, induced depletion by emptying the congested capillaries, and produced a slightly watery stool. In the inflammatory intestinal disorders of childhood, if administered early in moderate doses, it acts almost as a specific; while sulphate of magnesia induces a severe congestion, and generally destroys the epithelial lining. Experience has proved this observation to be correct; for, generally, when a large dose of Epsom salt has been given, the patient will suffer from constipation, or at least from sluggishness of the bowels, for several days afterwards.

The action of Glauber salt is so certain, and at the same time it is so much a true laxative,—not injuring the epithelial lining,—that a smaller dose is generally needed than in the case of sulphate of magnesia. In most cases one-half to one teaspoonful, if administered to an adult, largely diluted with water, one hour before breakfast, will induce one or two motions of the bowels about half an hour after the meal; and this result is brought about without the least griping, and without inducing subsequent constipation.—*Med. and Surg. Reporter*, Philadelphia, June 5th, 1886.

[I have prescribed sodium sulphate largely, in place of the magnesium salt, for out-patients of all ages at the Royal Infirmary, and also in private practice, and am convinced of its value as a simple and efficient aperient. It is especially adapted for children, on account of the mildness of its action, and also because it has not a nauseous taste like Epsom salts. As far as I can judge, it deserves to be classed as a "good old remedy," which has undeservedly gone out of fashion at the present time.]

COCAINE, AND SOME OF ITS USES.—*Sea-sickness.*—Dr. C. F. Mason writes to the *Med. Rec.* (N.Y.), June 19th, 1886: "In a recent trip from New York to Norfolk by sea, I had an opportunity of observing the remarkable curative effects of cocaine in sea-sickness. The cases treated (four in number) were all adults, two being physicians. The symptoms were extreme nausea and great depression; no vomiting. Cocaine hydrochlorate, in doses of twelve minims of a four-per-cent. aqueous solution, afforded almost complete relief in from fifteen to thirty minutes, so that the patients were enabled to dress and come on deck. After a second half-grain dose (two hours' interval) the relief was complete and permanent."

Neuralgia.—Dr. de Coninck (*Le Moniteur du Practicien*, Jan. 15th, 1886) states that in cephalalgia, having its seat in the temporal region, cocaine hydrochlorate, in one-per-cent. solution, has remarkable effects. The pain, however intense, will cease at once on applying to the external auditory canal a minim of the solution. A second application may be required after a few hours. In neuralgia of the fifth nerve and its branches the results were less certain, owing, perhaps, to the superficial mode of its employment.—*London Med. Record*, March, 1886.

Laryngeal Ulceration.—The pain and distress resulting from ulcerations within and about the glottis in advanced stages of tubercular phthisis can be greatly relieved by spraying or mopping the parts with a four-per-cent. solution of cocaine, or by placing a cocaine tablet on the base of the tongue. Phonation becomes more perfect and less laboured, respiration less difficult, and deglutition comparatively easy. The relief lasts four or five hours.

Hay-Fever.—Dr. E. F. Ingalls of Chicago and Dr. J. M. Costa have found it very valuable in this affection; and the latter uses it also in rose-cold. The strength used is from four to eight per cent., applied as a spray or by means of a dropping-tube. There are, however, persons who seem to be wholly insusceptible to its influence.

Pruritus Vulvæ is usually greatly relieved by the use of a four-per-cent. solution; and the same may be said of local irritations in the neighbourhood of the other mucous orifices of the body.

Earache.—Dr. S. Bishop of Chicago finds that it gives prompt relief, which is often permanent, even in cases of actual internal otitis. He prefers the drug in solution, rather than as a powder.—Dr. A. H. Agard, in the *Pacific Med. and Surg. Journ.*, June, 1886.

TREATMENT OF HYDATID DISEASE.—An interesting paper on this subject was recently read by Dr. W. Gardner before the South Australian Branch of the British Medical Association. It dealt principally with pulmonary hydatids. Taking all the statistics at command, it seems that of 212 cases of spontaneous rupture, 101 recovered and 111 died—less than fifty per cent. of recoveries. Bruen, in his article on "Pulmonary Hydatids," in Pepper's *System of Medicine*, says that thirty or forty per cent. of cases terminate in recovery if the cysts burst spontaneously; death being caused in others by suppuration and exhaustion. Dr. Gardner's conclusion is, that the expectant method will only be applied in the case of ruptured cysts which are causing little inconvenience and are in process of cure, and such cysts as are so situated as not to be amenable to surgical treatment. He holds that all hydatid cysts of the external surface of the body should, immediately upon the establishment of the diagnosis by the aspirator or hypodermic needle, be incised, and the cyst removed; and that hydatids of the lung or abdomen should be first tapped, in the hope of thus effecting a cure. A radical operation should be resorted to on the appearance of suppuration or of opacity of the fluid.—*Journ. American Med. Assoc.*, June 5th, 1886.

Dr. Spisharny, of Moscow, describes, in *Vratch*, three cases of hydatid disease of the liver under the care of Professor Sklifassovsky; all terminating in recovery. The Professor is strongly in favour of free incision, and sewing of the wall of the cyst to the edges of the abdominal wound. Statistics are in favour of this proceeding. Neisser has collected 300 cases of hydatid disease of the liver treated by different methods with Listerian precautions. The results were mostly unsatisfactory. The majority of this series were treated by puncture. In another series of 132 cases treated in Mecklenburgh, the cyst in twenty-five burst spontaneously; fifty-two per cent. of these died. In seventeen the cyst was punctured; the mortality being fifty-eight per cent. In twenty-eight cases incision and fixation of the cyst-wall was performed, with only twenty per cent. mortality. Korach has employed incision in eighteen cases; in six of these the incision through integuments and cyst-wall was done in two stages. All of the latter recovered; one of the remaining twelve died. Incision is becoming the most popular method amongst Russian surgeons, who have considerable opportunities of studying hydatid disease in their wards. There can be no doubt that aspiration is a dangerous proceeding. Incision is generally satisfactory, provided that there is no

cyst behind that which is opened. If there be others, the risk of fatal suppuration will be very great.—*Journal American Med. Assoc.*, July 3rd, 1886.

Substitutes for Fehling's Solution.—Prof. Holland gives the following as a test for sugar; it is very efficient, easily prepared, and is not spoiled by keeping: Dissolve ʒi of cupric sulphate in ℥i of glycerine. Add 5 drops of this to ʒi of liq. potassæ in a test-tube. Boil a few minutes, to test its purity. Should it remain clear, add a few drops of urine. If glucose be present in quantity, the red precipitate is at once formed. To detect minute amounts of sugar, ʒss of urine should be added, and the fluid again boiled. As it cools it will turn an olive-green colour, and become turbid, even if a very minute quantity of glucose be present.—*Canadian Practitioner.*

M. Schmiedeberg uses mannite in place of Rochelle salt in making Fehling's solution. He says it ensures stability to the solution. The formula is as follows: Dissolve 34·632 grammes of crystallised copper sulphate in 200 cc. of water; to this solution add a solution of 15 grammes of very pure mannite in 100 cc. of water, and 480 cc. of solution of caustic soda (1·145 sp. grav.); and, lastly, sufficient water to make one litre.—*American Journ. of Pharmacy*, Jan., 1886, and *Practitioner*, June, 1886.

Action of Potassium Bichromate.—Dr. Alfred Drysdale publishes in the *Medical Press*, April 21st and 28th, 1886, an elaborate paper on the sphere of action of this salt. After describing its very marked and characteristic effects in those cases in which it is rapidly fatal as well as in chronic poisoning, he suggests that as a remedy it may be reasonably hoped to modify pathological processes in tissues which are specifically acted upon by it, such as the respiratory passages and alimentary canal, the liver, kidneys, skin, and bones. It has been used, and with a certain amount of success, in scrofulous eczema, farcy, digestive disorders, marasmus, and syphilis. Polypi of the nose, recurrent after repeated removal with the forceps, will often yield to the topical application of a snuff composed of one part of potassium bichromate to nine parts of sugar of milk. It also promises success in the treatment of hay-fever; and, as a gargle in acute ulcerated sore throat, as well as in cases of indolent enlargement of the tonsils (2 grains to ℥i of water with ℥ss of glycerine). When given internally, as in the treatment of certain forms of dyspepsia, chronic intestinal catarrh, and in syphilis, the dose should not

be more than ¼ grain daily, though sometimes ⅕ grain will produce violent emesis.—*Therapeutic Gazette*, June, 1886.

PERTUSSIS.—The stubborn resistance this affection offers to therapeutic skill is clearly shown by the constant references to its treatment in medical journals all over the world. So many vaunted remedies prove valueless in the light of further experience, that one hesitates to call attention to any new plan of treatment. Still, among the chaff, there must be some few grains, therefore the following statements are given for trial in the sieve of practical experience:

(1) Dr. Moncorvo, of Rio de Janeiro, recommends painting the isthmus of the fauces and the laryngeal orifice with a solution of cocaine (10 per cent.); to be followed in a few minutes with a solution of resorcin, which he believes is the specific germicide of the disease.—*London Medical Record*, March 15th, 1886.

(2) At a recent meeting of the Société de Biologie, MM. Brown-Séquard, Laborde, and d'Arsonval, united in praising the effects of narceine in whooping-cough and chronic bronchitis with hypersecretion. This alkaloid exists in opium, but in very minute quantities—about ·02 per cent.—and its formula is $C_3\ H_{29}\ NO_9$. Most investigators conclude that in its action upon man it resembles morphine, but is milder. The testimony heretofore has been so conflicting that doubts have arisen as to whether the same alkaloid has been used. M. Laborde now says that a very easy test of its purity is to add to the solution a drop of hydrochloric acid, when a beautiful blue colour is produced. The usual dose for an adult is ½ to 1 grain; and for a child, ⅙ grain dissolved in syrup.—*Medical Record*, N.Y., July 17th 1886.

[The first notice of its value in pertussis occurs in the *British and Foreign Medico-Chirurgical Review*, 1866.]

(3) Dr. W. T. Parker, of Newport, Rhode Island, advocates the use of quinine, in doses of ½ to 1 grain, or more, every two hours, for even young children; and says that improvement begins after the first two or three doses. Dr. Dawson, also, employs small and repeated doses. Drs. Sauerhering and Bachem use insufflation of a powder of quinine hydrochlorate and gum arabic (3 to 1).—*Philadelphia Medical Times*, July 26th, 1886, and *Medical Record* (N.Y.), July 3rd, 1886.

(4) Dr. W. T. Greene (*Medical Press*, April 7th, 1886; *Therapeutic Gazette*, May, 1886) suggests an improvement on the old plan of sending children on visits to gas-works. He attaches a piece of rubber tubing to a burner, the tubing being long enough to reach the floor. The gas is then turned

on just enough to make its odour perceptible, and the child allowed to stand over and inhale it for a few minutes, several times a day. After a few inhalations, great improvement is said to result.

(5) A Tasmanian correspondent of the *Australasian Medical Gazette*, May, 1886, recommends the use of carbolic acid internally, but does not state the dose he gives.

[After a somewhat extended trial of many drugs in whooping-cough, I have come to the conclusion that carbolic acid is more frequently efficacious than any other in controlling the cough and sickness. One-sixth to one-third of a minim (increased cautiously, if necessary), in combination with simple syrup, ʒss to ʒi, forms a mixture which is not unpalatable to most children, and this may be given every five or six hours.]

Treatment of the Hysterical Attack.— Dr. Albert Ruault gives a simple method which he has found very efficacious in controlling the hysterical fit. It consists in maintaining firm pressure over the supraorbital nerves at the points of emergence from the foramina. The head is held securely between the palms of the hands, while pressure is made on each side with the thumbs. He says that the patients under this treatment first contract the facial muscles with an expression of pain, cry out, and then take several quick successive inspirations. The breath is held for a few seconds, and then, with a long expiration, the muscles relax and the attack is ended. The pressure should now be relaxed, otherwise it may have the opposite effect, and excite another convulsion. Pressure over any nerve-trunk at the point where it becomes superficial will have the same effect; but the supraorbital nerves are chosen because of their convenient situation.— *France Médicale*, and *American Pract. and News*, July 10th, 1886.

Infant Feeding.—Dr. A. V. Meigs, in the *Philadelphia Medical Times*, June 12th, 1886, says that for a new-born child the best artificial food is the following: Two tablespoonsful of cream, one tablespoonful of milk, two tablespoonsful of lime-water, and three tablespoonsful of sugar-water; the latter being made by dissolving $17\frac{3}{4}$ drachms of sugar of milk in a pint of water. For older children Mellin's food may be added in the proportion of one level teaspoonful or more to the ounce of food. He objects to the use of cow's milk, either pure, or diluted and sweetened.

How to Prevent Colds.—Dr. Brown-Séquard, speaking at the Société de Biologie, said: "The neck is one of the most

sensitive regions of the body, and it is not doubted by anyone that a large number of cases of bronchitis, &c., are reflex phenomena from the impression of cold on the nerves of the skin in that region. To prevent these troubles, the sensibility to cold must be diminished. To this end I have advised several of my patients to blow air on the neck from a blower, at first using warm air and gradually cooling it off. In ten sittings most of them had become so accustomed to it that they became quite impregnable to the action of cold." In America, water is used instead of air for the same purpose.—*American Pract. and News*, June 12th, 1886.

Menthol in Urticaria and Pruritus.—Among the myriad of remedies for these troublesome affections we have no other which affords such complete and instantaneous relief as a solution of menthol. We have used this remedy for urticaria in three cases. Not only is the itching relieved for the time, but a cure seems to be effected. In pruritus ani and in eczema, moistening the parts with menthol solution causes an immediate cessation of pain. The solution should contain from 2 to 10 grains of menthol to the ounce of water.—*Pharmaceutical Journal*, May, 1886.

Sciatica—Puncture of the Nerve-sheath.—Sir Joseph Fayrer states, in the *Practitioner*, April, 1886, that some years ago he was asked to see a case of severe sciatica of long standing in a man of middle age. The pain was very severe, continuous, liable to increase, and of a paroxysmal character. The posterior muscles of the thigh were somewhat atrophied. The patient himself was wasted and worn by continued suffering and deprivation of rest and sleep. There was no history of rheumatism, gout, syphilis, or other specific cause. A malarial origin, of course, was possible; but there was no satisfactory explanation of the origin of the disease. All the usual methods of treatment had been resorted to, but without relief. On examining the limb, he detected some fulness and tenderness with slight fluctuation in the course of the sciatic nerve at the upper part of the thigh. He, therefore, introduced a long narrow knife into the swelling until it entered the sheath of the sciatic nerve. This gave exit to about two drachms of clear, serous fluid: immediate relief followed, and ultimately complete recovery. He says that he has seen other cases—none, however, so well marked as this one—where puncture has given relief; but he is not aware of others having similar experience, and would therefore call attention to it as of practical interest.

GERMICIDES, SO-CALLED.—Klein, in a recent publication, claims to have demonstrated that many of the most popular antiseptics, as now used, are as harmless to the life of the microbe as water. The matter is one of great practical importance. Unless his conclusions are disproved, they will weaken confidence in all germicidal measures. He has found that quite weak solutions may render germs quiescent, even for long periods; but this is no proof that they are lifeless, for when they are subsequently placed in media suitable to their development, they become active, and increase rapidly. He has exposed for twenty-four hours spores of the bacillus anthracis to Calvert's fluid, pure terebene, phenol (10 per cent.), and mercuric chloride (1 per cent.), and then inoculated guinea-pigs with them, using spores and antiseptic and all in the process. The animals died of anthrax, and the blood was found teeming with the bacillus.—*Pacific Med. and Surg. Journal*, June, 1886.

NOTE ON HEMI-RHEUMATISM, OR THE ONE-SIDED PREDOMINANCE OF MANIFESTATIONS OF CHRONIC RHEUMATISM.—M. Cazalis draws attention to a feature of chronic rheumatism which he and others, as well as Dr. Demeaux, have frequently observed, but which has not been described in any of our classical treatises. The conclusions of his work are as follows:—

(1) In more than two-thirds of chronic rheumatics there exists, in some cases during a long period, a tendency to arthritic manifestations, external or internal, predominating on one side of the body; and sometimes this predominance is such that these cases might be called hemi-rheumatics.

(2) In these hemi-rheumatics the right side appears the most frequently affected.

(3) When pulmonary congestion, or bronchitis of an arthritic nature, shows itself in these patients, these conditions oftener appear on the side in which the rheumatism preponderates. It is on that side is observed that pleuritic friction which M. Collin (de Saint-Honoré) has considered to be an indication of arthritism, and which, with M. Cazalis, corresponds to the friction or crepitation of the joints in dry arthritis. As hemi-rheumatism is oftener observed on the right side, one understands why M. Collin at once localised his pleuritic friction on the right side.

(4) On the side on which rheumatism predominates, is also more frequently observed that other and more constant

sign of chronic rheumatism—sometime ago recognised and described by M. Verneuil and M. Potain—the deformity and projection of the great toe.

(5) If, in simple chronic rheumatism, hemi-rheumatism appears oftener to affect the right side, hemichorea and hysteria, on the contrary, which to many practitioners of the present day seem to be transformations of arthritism from one generation to another, more frequently affect the left side. Now, if hemicrania is added to these arthritic attributes, a singular tendency to hemilaterality will be recognised in all these arthritic modifications.

(6) These facts seem to support the still uncertain theory, but which is becoming more and more in favour, that the central nervous system greatly influences the localisation of these chronic rheumatic manifestations.—*Bulletin de l'Académie de Médecine*, No. 17. April 27th, 1886.

R. Shingleton Smith.

OPHTHALMOLOGICAL NOTES.

By F. Richardson Cross, M.B. Lond., F.R.C.S.; Surgeon to the Bristol Eye Hospital; Ophthalmic Surgeon to the Bristol Royal Infirmary.

The Relation between Dental and Ocular Affections.—In his presidential address to the Bath and Bristol Branch of the British Medical Association, Mr. Gaine described a case of ptosis and amaurosis, associated with fractured upper molar and pus in the antrum. Removal of the stump and evacuation of the pus was followed by disappearance of the ptosis.

Dr. Ward Cousins showed, at Brighton, an incisor tooth, perfect in outline and in structure, which he had removed from the orbit of a child two years old. Mr. Tracy regarded this as a tooth displaced during an early stage of development.

Burnett *(Archives of Ophthalmology)* reports a case of abscess in the superior maxilla and orbit, followed by atrophy of the optic nerve, which resulted from an unsuccessful attempt to extract the upper canine tooth.

At the recent Ophthalmological Congress, held in Paris, M. Paul Redard described a number of cases in which dental affections were evidently the source of ocular disturbance, such as glaucoma, amblyopia, and cloudy vision. In asthen-

opia without any apparent cause, the teeth should always be examined. M. Gayet mentioned a case in which ocular disturbance was produced by a tooth fixed on a pivot. The symptoms appeared and disappeared according as the tooth was removed or replaced. M. Fieuzal had observed so many of these cases of correlation between ocular and dental affections, that he had urged that a dental clinic should be annexed to the Quinze Vingts Hospital for blind people. M. Suarez and M. Galezowski mentioned similar facts. M. Gaval mentioned a series of cases, of an inverse order, in which dental disturbance disappeared after operating for glaucoma.—*Brit. Med. Journ.*, June 19th, 1886.

Glaucoma.—M. Panas, in a paper read at the Académie de Médecine, in June, 1886, concludes (1) that, in certain forms of glaucoma, myotics act not only as palliatives, but as curative agents; (2) to obtain the best results from myotics, their use must be extended over a considerable period of time; (3) that after operation, or in cases where operation seems unadvisable, myotics are effective in preventing the progress of the disease.

Glaucoma caused by Instillation of Cocaine.—(1) Maier relates a case of a man, 52, who, having lost one eye at least ten years previously by absolute glaucoma, came one evening with slight symptoms of glaucoma in the other eye. Eserine was ordered, pending a sclerotomy. On the following morning, a condition of acute glaucoma had developed, and this was attributed by Maier to the instillation of one drop of cocaine in the evening and another in the morning, in mistake for the eserine. (*Lond. Med. Rec.*, June, 1886.) (2) Manz also reports a case of a woman, aged 50, with presbyopia, who came to him for glasses. Distant vision was normal; the anterior chamber was shallow, and there was a deep physiological cupping of the disc. Cocaine was used in the right eye, to facilitate examination. On the following day; Manz was sent for, to find in this eye a typical attack of acute glaucoma; he was told that severe pain in the eye, and headache, had come on the previous evening, with loss of sight. Iridectomy was at once performed, with a good result.—Abstract in *Inter. Journ. of the Med. Sciences*, April, 1886.

Prof. Guaita, on the contrary, considers that cocaine is very valuable in secondary and hæmorrhagic glaucoma; that it reduces ocular tension, and produces relaxation of the muscles within and connected with the eye.

The Cause of Regular Astigmatism.—At the Kentucky State Medical Society, held at Winchester, in June, 1886,

Dr. Allen Kelch, of Louisville, read a paper on this subject. He excluded (*a*) the aqueous humour and (*b*) the vitreous from being possible seats of the defect. Astigmatism shows a constant invariable amount of error under all conditions of the eye-focus; whatever the distance of the object looked at, it is the same cylinder which is always required, and that in a constant position. (*c*) The lens, which undoubtedly is the structure concerned in altering the focus of the eye in accommodation, cannot be concerned in astigmatism. Failure of accommodation is aided by spherical lenses, and not at all by cylinders, unless these are also required for distant vision. (*d*) The cornea still remains for discussion. The pressure of the lids upon the globe tends to compress the cornea in the vertical meridian, and to lengthen it in the horizontal, by which the refractive power is increased in the vertical and diminished in the horizontal meridian respectively. In order to neutralise these defects, cylinder glasses must be placed so as to increase the refraction of the horizontal meridian, or to lessen that of the vertical; that is, a convex cylinder must be put with its axis vertical, or a concave cylinder with its axis horizontal. Statistics of 900 cases are quoted, in 90 per cent. of which it was necessary to adjust the cylinders as above indicated. Dr. Kelch concludes that (1) regular astigmatism is due to changes in the spherical form of the cornea; (2) the cornea has its contour altered by the pressure of the lids, and in this pressure we find the cause of regular astigmatism.

[The image thrown upon the cornea by means of various instruments is shaped according to the corneal curvature, and this special shape of the image shows a constant relation to the astigmatic defect. Iridectomy and external operations also cause astigmatism. My experience of the necessary position of the cylinder agrees with the statistics quoted by Dr. Kelch; but a tilt of a few degrees is frequently necessary.]

Retinitis Pigmentosa.—In the American Ophthalmological Society, July, 1886, a discussion on the "Possible Retardation of the Progress of Retinitis Pigmentosa" was opened by Dr. Derby, of Boston. Several of the speakers related slight but definite improvement under use of the constant current. Absolute rest of the eyes was considered of great importance; but a case was quoted where very little change had occurred during eight years in a student who was twenty-four years old when the disease had been first diagnosed. The only drugs that seem of special service are mercury and iodide of potassium, where a syphilitic constitution may be suspected.—*Medical Record*, New York.

Reviews of Books.

Bright's Disease and Allied Affections of the Kidneys. By CHARLES W. PURDY, M.D. (Queen's Univ.) London: H. K. LEWIS. 1886.

This work aims at furnishing a systematic, practical, and concise description of the pathology and treatment of the chief organic diseases of the kidneys associated with albuminuria; and it includes a specially full and systematic description of scarlatinal and puerperal nephritis.

After a preliminary chapter on albuminuria, and one on uræmia, the following subjects are treated in order:—Acute nephritis, chronic nephritis, cirrhosis of the kidney, scarlatinal nephritis, puerperal nephritis, lardaceous degeneration, and cyanotic induration of the kidneys. It will be at once seen that the subject is dealt with from the clinical rather than from the pathological point of view, and that the author does not profess to deal with all the diseases of the kidneys.

The much discussed question as to the best tests for albumen in the urine is considered in detail, and the conclusions differ in some respects from those of the Albumen Test Committee of the Clinical Society (*Brit. Med. Journal*, June 5th, 1886). He says (page 44): "Of the five tests for albumin in the urine that have just been considered, the most sensitive are the mercuric and picric; next in order are heat, ferrocyanic, and nitric acid in the cold. The most reliable are the ferrocyanic and nitric acid (Heller's). It may be thought unnecessary to advise the use of so many tests for albumin: some have claimed that one or two are quite sufficient. I know of no test for albumin in the urine which under some circumstances has not misled the observer; and it is therefore my habit, in those rarer cases in which doubt arises, to submit the urine in succession to each of the five tests described." "An impression seems to have gained considerable belief with the profession that the smaller traces

of albumin in the urine are of little clinical importance; but it would be difficult to find a more signal mistake in the whole range of clinical medicine, or one behind which more danger to life lurks."

It may be observed that these traces of albumen are of much greater significance in the case of the male sex: the urine of women is so constantly contaminated with mucus and vaginal or uterine products, that little or no reliance can be placed on the traces of albumen found in the urine unless the latter has been removed by means of the catheter. These traces are admittedly of the gravest clinical significance, when found in the urine of the male patient; but no one would attach any significance to this fact in the case of the woman in the absence of some other indications of renal cirrhosis. Our author advises that two tests should always be employed: "These should consist of one of the most sensitive, as the mercuric, and one of the most trustworthy, as the ferrocyanic: in case no reaction be observed with either, it may be safely assumed that no albumin is present: if, on the contrary, a reaction be obtained with one, or both, then the whole five should be systematically gone through with as described." This advice is doubtless good: but, when the rule is systematically adopted of examining the urine of every patient, the amount of time involved will be too great: and further, the fallacies involved in each individual test are few and easily avoided: the busy practitioner will probably find it more convenient to use one test habitually, and reserve the others for those specimens where the first reaction gives an unreliable result. It must be better, as with drugs so with tests, to use those with which one is most familiar and has had most reason to trust: the fallacies soon become recognised, and can be easily avoided, whereas in using so many tests there must be more ambiguity and some conflicting evidence.

One advantage of the picric acid method, giving it a decided pre-eminence over the other tests, is that it may be used in the manner advised by Dr. George Johnson for the estimation of the quantity of albumen present. The method is simple, and appears to be reliable: a solution of five grains of picric acid to the ounce being added to a corresponding bulk of urine, in one of Esbach's tubes,* the amount of precipitated albumen is read off on the scale after standing for twenty-four hours, the figures indicating parts by weight in a thousand per volume, or grammes of dried albumen in a litre. This method would appear to be much simpler and more ready of application than that devised by Dr. Oliver,

* *Lancet*, July 10th, 1886.

in which the standard of opacity of a known solution of albumen, precipitated by the mercuric test, is imitated in ground glass, and kept as a standard with which specimens of urine, after precipitation with the mercuric test, and varying degrees of dilution, may be compared.

The short outline of the hygienic treatment of albuminuria is well worthy of careful perusal, and calls attention to various dietetic points on which there should be little difference of opinion, and almost as little diversity of practice: the limitation of the supply of albumen in the food, and the necessity for a liberal use of non-irritating fluids, are points which are very frequently neglected. The author advises ordinary distilled water, but still better for some patients would be the aerated distilled form sold as "Salutaris water."

"In the treatment of acute nephritis no time should be lost in rendering the urine alkaline, and maintaining it so by the administration of a saline, preferably the acetate or the citrate of potassium. The former should be given in doses of ten grains to half a drachm, and the latter in doses of twenty to sixty grains, both largely diluted with water, and repeated every two to five hours, according to the effect on the urine." As a reason for this practice, the author is in concert with observers in general in showing that renal casts, being mostly of an albuminous nature, are soluble in alkaline solutions, that they soon disappear from alkaline solutions outside of the body, and are rarely met with in alkaline urine. It is, therefore, easy to cause the urine itself to dissolve the plugs in the uriniferous tubes, and so effect their removal; hence the utility of these agents rests on a more solid basis than popular favour.

The use of peptonised milk is mentioned by our author only in order that he may give a caution with regard to it, because of certain reported cases in which its use has induced *albuminuria*. He wisely abstains from giving an authority for this statement, but surely he must be familiar with the fact that peptones in excess are eliminated by the kidneys, and will be precipitated by picric acid: that this precipitate is not albumen may be at once seen by its ready solubility on heating the contents of the test-tube; and further, that it is peptone may be confirmed by the copper and potash test. The presence of a little peptone in the urine would be an indication for diminishing the quantity of peptonised milk, but certainly not for withholding it if the indications for its use were still existing; it is only in those patients who take three or four pints of peptonised milk daily that any such peptone reactions are found, and cases of peptone poisoning

are of very rare occurrence. The results of treatment of chronic nephritis by a purely milk diet, as advocated by Dr. George Johnson, have been so encouraging that there is every reason to persevere in this kind of treatment; and where the coagulable milk may disagree, the peptonised milk will be the best possible substitute.

As regards the value of drugs in chronic nephritis, Dr. Purdy remarks that he has usually found a decrease in the quantity of albumen as a result of the administration of tannate of sodium, and of fuchsin: he also advises chloride of gold to check the growth of new connective tissue in cases of renal cirrhosis. Amongst the drugs not in everyday use he mentions the apocynum cannabinum, the fluid extract of which, in doses of five to twenty minims, he finds to be an efficient diuretic and cardiac stimulant. His experience of ergot is summed up in the following paragraph: "Ergot, also, has been used in the acute grades of this disease, principally with a view to check the discharge of blood from the kidneys. It sometimes effects this purpose, but with much less certainty and efficiency than digitalis."

We have directed action to only a few of the less familiar points described in detail in this volume: they will serve to indicate that the subject is fully and carefully described by a good clinical observer of large experience, who may well be consulted as a reliable guide in the difficult task of treatment of diseases too often considered to be incurable, but for which much may be done by well-timed and judicious interference.

The Refraction and Accommodation of the Eye. By E. LANDOLT, M.D. Translated by C. M. CULVER, M.A., M.D. Edinburgh: YOUNG J. PENTLAND. 1886.

The apparent simplicity of the adaption of lenses to imperfect vision is seen in the fact that the public consider watchmakers competent to help them in a selection of spectacles, or else they seek the aid of an ophthalmic optician, who, ignorant alike of physical optics and the physiology of the eye, advertises his ability to "suit all sights."

Undoubtedly the most important agent in the whole range of ocular therapeutics is the application of spectacles. The majority of patients who come for advice about their eyes require them, and without their aid many of the surgical procedures—such as strabismus operation—are sadly incom-

plete. At the same time, by help of competent knowledge, this form of treatment can be conducted on the sure basis of mathematical deduction: "in the doctrine of the anomalies of refraction and accommodation the connection between science and practice is more closely drawn together than in any part of medicine."

For twenty-one years, the classical work of Donders, published by the Sydenham Society, has been the only book for reference on this subject in the English language. It will always remain the great pioneer in this class of work, and is never likely to be entirely replaced. Having reached its majority, however, no wonder if a younger competitor should appear, in which the old work might be better arranged, whilst later scientific advances and the most recent methods of dealing with this branch of ophthalmic science might be introduced. Landolt, by his intimate knowledge of physical optics, by his reputation as a clinical surgeon, and by his past work and writings, seemed most competent to produce such a book; and it is interesting to note how largely we are indebted to the school at Utrecht (where our author was formerly a pupil of Snellen's) for advance in this direction.

The book before us is thoroughly up to date, and it is comprehensive. The clinical portion may be read alone, or studied after the theories of the subject have been considered. It contains also just what is wanted of physical optics.

Its form is admirable. It commences with the refraction of light, which is dealt with in the use of not very difficult mathematical problems. Lenses and spectacles—which are infinitely thin lenses—are fully described, and the advantages of the metric system—"Meterlinse," "Dioptry"—are well explained. The dioptric system of the eye is optically considered as the combination of three spherical refractive surfaces, with its principal and nodal points and conjugate foci. The first hundred pages of the book are devoted to this mathematical treatment of physical optics. It requires no high knowledge for understanding; but, if too technical, may be entirely omitted. The remaining five hundred pages are equally divided into a theoretical and a clinical portion. The theoretical portion deals with the refraction and the accommodation of the eye, and with the methods for their determination.

In considering the eye at rest—"static refraction"—the importance of the cornea (by separating the air and the aqueous) in deviating the luminous rays is insisted on; angle Alpha and angle Gamma are explained; and Helmholtz' dimensions of the dioptric system are given.

Emmetropia and ametropia in their various forms are discussed as "The Dioptric system of the Eye in its relation to the Retina." The methods for determining the refraction of the eye at rest are divided into subjective and objective: the former based upon the acuteness of vision, as tested by the use of reading-types and lenses in the ordinary way, or by some modification of this; or else by the aid of some optometer, examples of which are described and their working explained.

The objective determination of refraction is by means of the ophthalmoscope: (1) by the erect image; (2) by the inverted image; (3) by koroscopy.

The writer's observation in foreign clinics would incline him to believe that the objective method is much less used than in this country. Here the shadow test may be looked upon as the mainstay of practical refraction. It is in constant use in every clinic, and the results obtained by it are satisfactory both in accuracy and in saving of time. Landolt gives a good description of the method, and refers to Parent's writings on the subject; but he does not seem to work by it himself.

Under "Dynamic Refraction of the Eye," the parts concerned in accommodation—the ciliary body and the neighbouring structures—are fully described, together with their varying relations during change of focus; and an account is given of the various experiments upon which our present full knowledge of this subject depends.

The consideration of the amplitude of convergence and of accommodation is handled in a masterly way. The author's ophthalmo-dynamometer, and other methods of determination, are described.

Forty pages of the book are allotted to a separate chapter on astigmatism.

The part of the book of most interest to the surgeon is the clinical portion. It is, like the rest, well-written and scientific; but it is also eminently practical, and shows a common-sense consideration for the individuality of the patient, outside the mathematical formula for his dioptric derangement.

"There are many ametropes that do not need spectacles." "It is of the greatest importance to take into account the habits and fancies of the patient, and especially the glasses he has hitherto worn." "It is only actual experiment that can confirm the deliberations of the physician."

Strabismus, as being usually due to error of the dioptric system, is fully dealt with; and an interesting case is quoted

from Horner of Zurich, showing the value of proper focussing even upon a detached retina.

Typical myopia is looked upon as the result of natural development under civilization: the arts require ocular work at a short distance, and only a short range of vision is necessary for intellectual progress.

Once given the elongation of the eye, which is the almost constant cause of this refractive anomaly, its posterior axis, where it is left unsupported either by Tenon's capsule or by the recti muscles, will more and more suffer under the influence of pressure; while the neighbourhood of the macula, where function is most elaborate, shows the greatest liability to morbid change. Thus may result the tissue-degeneration which constitutes a malignant myopia.

It is imperative upon all branches of our profession to lessen this growing tendency in over-taught children; and Landolt very fully discusses prophylaxis as well as treatment.

Spasm and paresis of accommodation, with the drugs that cause or cure them, bring the volume to a close.

The translation is excellent, and the letterpress all that can be desired.

The Springs of Conduct. By C. LLOYD MORGAN, Professor of Geology and Zoology, University College, Bristol. London: KEGAN PAUL, TRENCH & Co. 1885.

The task which Professor Morgan has undertaken in this work; viz., to analyse the motives of human action and to probe the "abysmal depths of personality," is—as was said of the subclavian artery—"deep, dark, and dangerous;" and it is a proof of the careful study and knowledge he has brought to bear upon it, that it is clear, well expressed, compact, and, above all, free from that "transcendental moonshine" and "theosophico-metaphysical haze" that so often abound in books dealing in such matters. The author does not pretend to exhaust the subject; but within the limits of 300 pages, such questions as the relations of mind and body, many of the applications of the theory of evolution, the morals of conduct, free-will, determinism, feeling, and other kindred topics, are discussed with thoughtfulness and ability. The scientific training of the biologist shows itself throughout, and the explanations given or suggested are chiefly drawn from physiology and the all-pervading and

generally ill-understood doctrine of evolution. At the same time, the author strongly protests against the followers of so-called materialism, "who seem to believe that the ultimate elements reached by analysis have a truer reality than the phenomena submitted to analysis." The chapters on the structure and functions of the nervous system, and the conditions of consciousness, although open in places to criticism, are well written, and show a wide familiarity with the subjects. As a metaphysician, Professor Morgan chiefly acts as an exponent of others' views, with, here and there, a refutation or objection. For example, in Chapter IV. (Part II.) he falls foul of Mr. Herbert Spencer's "Persistence of Force;" and in Chapter III. (Part III.), of the lecture given at the Bristol Museum, by the Rev. J. M. Wilson, of Clifton College, on the evolution of Ethics. In these and other instances the questions discussed will probably remain undecided in the minds of many. The ideas of Descartes, Spinoza, Comte, and others have been evidently clearly grasped, and bear fruit in these pages. It is a compliment (but nevertheless true, we think) to say that few could read the book quickly, and still fewer without an acquisition of ideas on questions which ought to interest all who lay claim to scientific knowledge.

The Medical Digest, or Busy Practitioner's Vade-Mecum. Being a Means of Readily Acquiring Information upon the Principal Contributions to Medical Science during the last Thirty-five Years. Second Edition. 1882. The First Appendix to the *Medical Digest*, including the Years 1882–3–4–5 and Early Part of 1886. By RICHARD NEALE, M.D. Lond. LEDGER, SMITH and CO. 1886.

The first edition of this work, which was published by the New Sydenham Society in 1877, is not nearly so well known as it ought to be. The second edition was issued in 1882, and now Dr. Neale gives us an appendix which includes the years mentioned in the title. The work must ever remain a praiseworthy monument to the labours of one man, who thereby has laid the whole profession under a deep debt of gratitude.

Much material valuable to the practitioner lies buried in the pages of periodicals; and, although Dr. Neale's work

refers to only a few of these publications, yet to get even these dealt with in this manner is a gain not easily to be estimated. We should imagine that Dr. Neale will not claim any vested interests in this kind of work; and it would, probably, be no small satisfaction to him if he knew that his arduous task had stimulated others to work at the periodicals which he has not touched.

Dr. Neale says "it has been urged that without the periodicals to which reference is made the value of the book is diminished." This objection will always have great force, because the work—although it is more than a mere bibliographical index, inasmuch as it often gives the leading thought of the paper whose title is quoted—is not a Digest in the sense of giving an epitome of a communication which might serve as a substitute for the article itself. But, nevertheless, Dr. Neale's *Digest* is indispensable to all medical authors; and every doctor in practice should be the possessor of this book, which, in such a compact form, renders so many sources of information accessible to him.

With such books as Vol. III. of the Medical and Chirurgical Society's Library-Catalogue, Dr. Billings' *Index-Catalogue*, the *Index Medicus*, Dr. Würzburg's *Medicinische Bibliographie*, and Dr. Neale's *Digest*, the man who has to get up a special subject will, in the first place, be appalled at the vast amount of literature opened out before him, and then be grateful to the workers who have, in such systematic form, given him the titles of the works that will help him.

SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

Not such Bad Times after all.—*The Medical Record* (New York) observes that now we have meat lozenges and meat suppositories, it may truly be said that the druggists' art has made both ends meat!

Too Slow.—In remarking upon the saying by Carlyle, that "dyspepsia kills poetic ambition," the *Boston Post* says: "If dyspepsia would only get its work in more constantly, it would be for the comfort of the world generally."

Sir Thomas Watson and Sir James Paget.—At the recent banquet of the British Medical Benevolent Fund, Dr. Broadbent, in proposing the health of the chairman, Sir James Paget, applied to him the words Sir James himself had used of Sir Thomas Watson—"His knowledge was so vast, his goodness so great, and his example so elevating, that we all wished he might spend part of his immortality on earth."

Ilfracombe.—Some idea of the popularity of Ilfracombe may be gathered from the fact that a census taken of the number of visitors who slept in the town one Sunday night in August shows the following result: Staying at hotels, 503; boarding-houses, 554; apartments, 3381; with friends, 150; or in all, 4588. It is calculated that during the month of August, about 2000 day excursionists visit the town every week by the South Western Railway alone. On one Sunday there was not standing room in the parish church.

Hopeless.—Sir Astley Cooper relates the following anecdote of an Irish candidate before the Examining Board of the London College:—"What is a simple and what is a compound fracture?" asked the examiner. The reply was: "A simple fracture is when a bone is broke, and a compound fracture when it's all broke." Sir Astley asked him what he meant by "all broke." "I mean," he replied, "broke into smithereens, to be sure." I ventured to ask him what was 'smithereens.' He turned upon me with an intense expression of sympathy upon his countenance, "You don't know what is smithereens? Then I give you up!"—Sir Charles A. Cameron in *Dublin Journal of Medical Science*.

Boils.—A boil is generally very small at first, and a fellow hardly notices it; but in a few days it gets to be the biggest of the two, and the chap that has it is of very little account in comparison with his boil, which then "has him." Boils appear mysteriously upon various portions of the human body, coming when and where "they darn please," and often in very inconvenient places. . . . They are generally very lively and playful at night, and it is very funny to see a chap with a large one prospecting around his couch, for a place where his boil will fit in "without hurting it." . . . It is said that boils save the patient a fit of sickness. It is also said that a person is better after he has them; and there is no doubt that one feels much better after having got rid of them.—*Physician and Pharmacist (Cincinnati Lancet and Clinic).*

Lucre.—An Indian physician was holding forth the other day to some of his brothers of the craft in England. "You sairs in the West," he said,

"do not understand the practice of medicine. In my country, if a rajah with nothing of sickness sends for me, I go and I say, 'Sair, your case is a bad one; you will be worse before you are better.' I give him some medicine and I go away. The next day I go again, and I find him heaving like a sea-sick mandarin, and wishing that the son of his mother had never seen the light. 'Sair,' I say, 'I told you so; you have passed a great crisis. There is no more need of medicine. Another sun will see your cure complete.' I then collect my fees, and I go away. When I have cured a few more rajahs, I shall come again to your country and take a villa on your little river Thames, with the green turf sloping down to the waterside."

Ladies' Dress.—The inevitable extremes of fashion have led, during the past winter, to that peculiar folly by which society women have aimed to display a minimum of dry goods upon a maximum of bust: the result has been that a fashion plate is but little different from an anatomical plate. It is the result, we suppose, of reaction from that dictum of society, or of *court* (as not long ago in Canada), which led women to dress as if they were affected with cynanche tonsillaris. They are in a fair way now to acquire that which they were then well protected against. A doctor who had just come from a dinner party was recently asked how the ladies were dressed. He replied, "Well, now, I give it up; I didn't look under the table."

In all ages of the civilised world satirist-poets have sung, moralists have preached, and physicians and hygienists have protested, concerning the dangers which each saw menacing the transgressors of the natural law of dress, and all, so far as one can see, absolutely without effect. The demands of fashion are like the religious prejudices of the ignorant fanatic—too strong to be altered either by persecution or ridicule. Of these two weapons we deem the latter the stronger; and we have been not a little surprised at seeing it assumed, on the offensive, in the columns of that staid and conservative contemporary of ours, the *Boston Medical and Surgical Journal:*

> "To the medical man of serious tastes, who never, in whatever circumstances of frivolity he may find himself, forgets that he belongs to the gravest of professions, and who lets slip no opportunity of perfecting himself in the principles of the art, the prevailing mode of ladies' evening toilettes offers great possibilities.
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> "Dragged, perhaps unwillingly, from his sterner duties by the demands of social life, his time is yet not thrown away. Should surgery be his delight, he finds abundant facilities in the drawing-room or at the opera for viewing or reviewing topographical anatomy. The triangles of the neck are often more freely demonstrated by the very class of subjects in whom the anatomical landmarks are most clearly visible. There is more difficulty in studying the axillary space in its completeness, though its anterior and posterior boundaries, the pectoralis major and the latissimus dorsi, can usually be well made out. The advance of fashion has, unfortunately, not as yet brought under observation the other regions of great anatomo-topographical interest. While mechanically paying out his share of the small coin of social converse, the surgeon is really making the incisions for ligature of the subclavian, the brachial, and the innominate; he is considering how the appearances would be changed in case of a fracture of the coracoid process, or a dislocation of the humeral head, or of the sternal end of the clavicle. Perhaps he is planning out an operation for the ablation of the mammary gland. Who knows?
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> "If chest diseases are his specialty, he lays out the boundaries of the pulmonary lobes, wonders if the cardiac dullness extends further to the left than the line which his practiced eye describes as the normal boundary, and upon the lady who stands in front of him, determines the proper point to enter a needle for thoracentesis. These opportunities are not to be lightly overlooked by any."

We wonder if a single lady could be frightened out of her customary anatomical display by the thought that some doctor was planning out upon *her* fair form the operation he was the next day to perform upon some poor wretch; in other words, was utilizing the animated manikin thus presented to his gaze.—*The Medical Press of Western New York.*